

## 5. TAMPA BAY TO APALACHEE BAY

(1) This chapter describes the 170-mile Gulf coast of Florida from Tampa Bay to Apalachee Bay, the numerous rivers emptying into this section of the Gulf, and the passes making from the Gulf to the Intracoastal Waterway. Also described are the deep-water ports of Tampa, Port Tampa, Port Sutton, St. Petersburg, and Port Manatee, and many smaller ports.

(2) The section of the Intracoastal Waterway from Tampa Bay to Anclote Anchorage passing through the waters described in this chapter and places along its route are discussed in chapter 12.

(3) **COLREGS Demarcation Lines.**—The lines established for this part of the coast are described in **80.750 through 80.805**, chapter 2.

(4) **Chart 11400.**—Depths of 18 feet extend nearly 5 miles from shore on either side of the dredged channel into Tampa Bay.

(5) From Tampa Bay 35 miles N to Anclote Keys, the bottom is broken, and depths of 18 feet or less are sometimes found more than 4 miles offshore. The coast is bordered by a line of long narrow barrier islands which overlap at the ends. The Gulf sides of the islands are straight or gently curving sand beaches, backed by dense growth. Between the islands and the mainland is a chain of shallow bays and passages. Prominent N of Tampa Bay are water tanks and numerous tall buildings along the beaches; a large hotel in Clearwater and a water tank near the center of Clearwater Beach Island; and an abandoned light structure.

(6) A coral habitat area of particular concern (HAPC) is on **Florida Middle Ground**, centered about 95 miles NW of the entrance to Tampa Bay. (See **50 CFR 638**, chapter 2, for limits and regulations.)

(7) Between Anclote Keys and Cedar Keys, 60 miles to the N, the low coast is fringed with marsh broken by shallow rivers and creeks that can be entered only by small craft. Small keys and islets border the coast, and broken ground extends as much as 15 miles from shore. The bottom slopes gradually shoreward, but there are many rocks and shoals in the deeper water. Between Anclote Keys and Cedar Keys, a stack near the mouth of the Anclote River and four stacks near the mouth of the Crystal River are reported prominent.

(8) Bird guano racks, consisting of square platforms on piles about 20 feet above water, have been built on the outermost shoals between Tampa and Apalachee Bays; some have been destroyed in aerial gunnery practice, leaving broken piling which constitute a hazard. Not all of the racks are charted.

(9) Numerous fish havens, some marked by private buoys, extend as much as 10 miles offshore along this section of coast.

(10) The coast extends in a general NW direction from Cedar Keys for about 75 miles to Apalachee Bay. The low marsh along the shoreline is 1 to 2 miles wide and is backed by pine forests. The coast is broken by several small rivers and creeks, some of which are navigable for drafts of 4 to 5 feet. The bottom is broken and irregular for a distance of about 10 miles from shore, and coral heads and reefs are numerous. This stretch of coast is frequented mostly by shrimpers and other fishermen, who can assist strangers to enter any of the rivers or creeks. The shoal water affords fair anchorage, with considerable protection from heavy seas, for light-draft boats.

(11) **Weather.**—Along the coast from Tampa Bay to Apalachee Bay, tropical cyclones, thunderstorms, and cold fronts are the po-

tential weather hazards. Within the June through November hurricane season, June and October present the greatest risk. Twenty-nine tropical storms have approached the coast from Tampa northward to Apalachicola since 1950. They usually approach the area from the S through SW. Tides have run 12 to 15 feet above normal, especially in the Florida “bight” of Apalachee Bay.

(12) Thunderstorms develop on about 50 to 85 days annually along this section of coast. They are most likely from May through September when they occur on 8 to 20 days per month; July and August are the most active months. The Tampa Bay and Apalachee Bay areas are the most active. Offshore thunderstorms occur 5 to 6 percent of the time in July and August and are most frequent at night. Thunderstorms can spring up quickly, generate strong gusty winds, and may contain hail or even tornadoes or waterspouts. They can occur as isolated cells or as an organized squall line sometimes preceding a cold front.

(13) Cold fronts from the N occasionally reach these waters from fall through spring. At Tallahassee, temperatures drop below freezing on 30 days annually compared to 3 days at Tampa. The Gulf modifies the cold air masses quickly. Strong winds from these fronts or low pressure systems that form in the Gulf of Mexico result in gale-force winds (34 knots or more) occurring 1 to 2 percent of the time and windspeeds of 28 knots or more blowing 3 to 5 percent of the time from November through March. Wave heights of 10 feet or more are encountered about 3 to 8 percent of the time during this period.

(14) Visibilities are generally good along this section of coast. They may be briefly reduced to near zero in heavy showers or thunderstorms, but they fall below 2 miles less than 2 percent of the time from April through November over open waters. On the coast, fog occurs an average of 127 days annually at Tampa, compared to 208 days in the Tallahassee area (obstruction to visibility is not considered in these numbers). Most of this occurs from November through March in the Tampa area but is spread throughout the year in the Tallahassee area. It is most likely during the early morning hours.

(15) **Chart 11412.—Tampa Bay**, a large natural indentation about midway along the W coast of Florida, is one of the important harbors of the Gulf coast and is easily accessible day or night. The bay extends NE for about 20 miles, and is 6 to 7 miles wide. It is the approach to Manatee River, Boca Ciega Bay, Old Tampa Bay, and Hillsborough Bay, and to the cities of St. Petersburg, Port Tampa, East Tampa, Bradenton, Port Manatee, and Tampa.

(16) The entrance to Tampa Bay, between Mullet Key on the N, and Anna Maria Key on the S, is 4.5 miles wide. Egmont Channel, the main deepwater ship channel, has been dredged through shoals that extend about 6 miles W of the entrance. **Tampa Bay Lighted Whistle Buoy T** (27°35'18"N., 83°00'42"W.), 13.5 miles W of Egmont Key, is equipped with a racon and marks the approach to the bay. Egmont channel is marked by high-intensity range lights showing fixed white lights by day and fixed green lights by night which are normally visible approaching Tampa Bay Lighted Whistle Buoy T from sea.

(17) **Prominent features.**—**Egmont Key**, a low, sandy, and wooded island almost in the middle of the entrance to Tampa Bay, is about 1.6 miles long. **Egmont Key Light** (27°36'00"N.,

82°45'36"W.), 85 feet above the water, is shown from a white tower on the N end of the key. A pilot station lookout tower near the center of the island and nearby buildings are conspicuous. A draft of about 15 feet can be taken to the small pier just inside the N end of the key.

(18) **Old Fort DeSoto** on the S end of **Mullet Key** and a tall water tank on St. Jean Key about 1.5 miles NE of the fort stand out at the head of Egmont Channel. Also prominent to the N are the numerous tall hotel and apartment buildings and a church spire; a tall building on Maximo Point; and farther N other numerous tanks and buildings along the beaches and at St. Petersburg and Gulfport.

(19) **COLREGS Demarcation Lines.**—The lines established for Tampa Bay and tributaries are described in **80.750**, chapter 2.

(20) **Vessels should approach the harbor through the Tampa Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(21) The entrance and all other navigable waters of Tampa Bay, Hillsborough Bay, Old Tampa Bay, and tributaries herein are within a **regulated navigation area**. (See **165.1 through 165.13**, and **165.709**, **165.752**, and **165.753**, chapter 2, for limits and regulations.)

(22) **Tampa Bay Navigation Guidelines.**—The Greater Tampa Bay Marine Advisory Council and the Coast Guard Captain of the Port recommend that the following guidelines regarding the movement of vessels in and out of port be adopted and practiced by pilots, masters, and persons in charge of vessels.

(23) Nothing in these guidelines shall supersede or alter any applicable laws or regulations. In construing and complying with these guidelines, regard shall be had to all dangers to navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from the guidelines necessary to avoid immediate danger.

(24) a. Ship draft of 39 feet plus the tide to a maximum of 41 feet at higher conditions of tide is considered reasonable in and out of Tampa Bay.

(25) b. During periods of restricted visibility, vessels should not transit the bay unless at least two sets of channel buoys are visible ahead. Vessels should proceed at speeds which are considered safe for existing conditions.

(26) c. Whenever possible, vessel movement arrangements should be made via landline through the local agents. If time is of the essence, arrangements may be made via radiotelephone.

(27) d. When arranging a movement between a vessel in port and a vessel which has not yet entered the port (at the sea buoy), a general rule of precedence is that, under normal circumstances, outbound vessels have priority with the following exceptions:

(28) 1. Within the port area incoming and outgoing vessels restricted by tide should split time, with no more than two vessels trying to make the tide.

(29) 2. If a vessel having priority is unable to clear the berth or enter the port within 30 minutes of the time agreed upon, that vessel loses priority.

(30) 3. All meeting and passing situations should be made at the safest possible locations, with due regard to the size of the vessels, width of the channel, and existing conditions. Both vessels should adjust speed to accomplish this safely. Vessels least affected by existing conditions (current and winds) should give way to the other. Light-draft vessels should give way to deep-draft vessels if conditions permit.

(31) When one vessel is underway inbound and the other vessel is safely moored at berth, the vessel at the berth should remain alongside if no safe passing area can be agreed on.

(32) **Vessel Traffic Advisory System, Tampa Bay.**—The Vessel Traffic Advisory System (VTAS) for Tampa Bay is operated by the Tampa Port Authority Operations Department. The VTAS's mission is to help masters, pilots, and persons in charge of vessels determine the safest location for meeting or passing other vessels in Tampa Bay. The VTAS consists of an Operations Center, which receives, relays and monitors position reports.

(33) Contact the VTAS by telephone on 813-905-5045, FAX 813-905-5048. The VTAS monitors VHF-FM channels 16 and 12, works on channel 12.

(34) Voice calls are "Tampa Traffic" or "Vessel Traffic Advisory" or "WHX-362".

(35) **Required Reports to the VTAS.**—Vessel's representative 24 hours prior to arrival and/or departure shall provide the following to the VTAS:

(36) a. Vessel's name, call sign, location and intention

(37) b. Vessel's ETA sea buoy/ETD dock

(38) c. Vessel's Beam, Length, Draft

(39) d. ETA/ETD to be updated immediately if there is a change

(40) Vessels should contact the VTAS prior to entering Tampa Bay or leaving dock.

(41) When contacting the VTAS you should be prepared to provide the following information:

(42) a. Vessel's name, location, and intentions

(43) b. Vessel's beam and draft

(44) c. Inbound:

(45) (1) ETA Sunshine Skyway Bridge

(46) (2) ETA dockside

(47) d. Outbound:

(48) (1) ETD dockside

(49) (2) ETA Sunshine Skyway Bridge

(50) e. Telephone number and/or VHF-FM channel you are standing by on. When you call in you should receive the following information from the VTAS:

(51) (1) Name, beam, draft, and destination of vessels you may expect to encounter during your time of transit.

(52) (2) Their telephone number and/or standby on VHF-FM channel.

(53) **Channels.**—A Federal project provides for a main channel with depths of 45 feet in the entrance from the Gulf, thence 43 feet to Tampa and 34 feet to Port Tampa. (See Notice to Mariners and latest editions of charts for controlling depths.)

(54) **Egmont Channel**, the main ship channel, extends between Mullet Key and Egmont Key and is used by all deep-draft vessels entering Tampa Bay. A lighted **083.6°** range and lighted buoys mark the dredged cut over the bar.

(55) The main ship channel continues through Mullet Key Channel and dredged cuts leading up the bay through Tampa Bay, Hillsborough Bay, and Old Tampa Bay to Port Manatee, Big Bend, Alafia River, Port Sutton, Tampa, Port Tampa, and Weedon Island. The channels are marked by lighted ranges, and lighted and unlighted buoys.

(56) **Southwest Channel**, a natural passage on the S side of Egmont Key, had a controlling depth of about 14 feet in 1996, but is subject to shoaling. The approach is marked by a lighted bell buoy, and the channel by lighted and unlighted buoys. **Passage Key**, on the S side of Southwest Channel, is a low sand island

about 0.3 mile long and showing about 4 feet above high water. The key is barren and is used as a bird refuge. **Passage Key Inlet**, between Passage Key and Anna Maria Key, has a controlling depth of about 9 feet in an unmarked shifting channel; it is used only by small local craft.

(57) **Measured course.**—Four measured nautical mile courses, each connected to the other and forming a square, are on the NW side of Tampa Bay channel about 7 miles NE of Sunshine Skyway. The range for the southeasterly and northwesterly courses is 037.7°-217.7° and the range for northeasterly and southwesterly courses is 127.7°-307.7°. The range markers are square white daymarks with black letters and orange reflective borders on piles.

(58) **Anchorage.**—Vessels with good ground tackle should anchor in the Tampa Anchorages, N of the Tampa Safety Fairway leading to Egmont Channel. (See 166.100 through 166.200, chapter 2.) An emergency anchorage is S of Mullet Key in depths of 30 to 35 feet; and SW of Gadsden Point in natural depths of 29 to 32 feet.

(59) Explosives and quarantine anchorages are E of Mullet Key, NE of Pappys Point, and S of Interbay Peninsula. (See 110.1 and 110.193, chapter 2, for limits and regulations.)

(60) **Dangers.**—Shoal areas extend seaward from Egmont Key as far as **Palantine Shoal**, which is 5 miles W of the key and on the S side of Egmont Channel entrance. Palantine Shoal consists of several small lumps with depths of 11 to 18 feet over them. Spoil areas, for the most part unmarked and with reported depths of 10 feet or less, border the dredged cuts of the main ship channel in Tampa Bay and the channels in Old Tampa Bay. Caution should be observed particularly at the entrances to the side channels leading to Port Manatee, Alafia River, and Port Sutton.

(61) Local weather during the thunderstorm season is unpredictable, and intense winds can develop suddenly. Before entering or departing the port, mariners should obtain local weather forecasts, maintain a close watch on the weather, and ensure that light vessels are properly ballasted during the transit.

(62) **Safety zones** have been established around vessels carrying anhydrous ammonia or liquefied petroleum gas when transiting or moored in Tampa Bay. (See 165.1 through 165.7, 165.20 through 165.23, 165.703, and 165.704, chapter 2, for limits and regulations.)

(63) A **regulated navigation** area has been established to protect vessels from limited water depth in **Sparkman Channel** caused by an underwater pipeline (See 165.1 through 165.8, 165.10 through 165.13, and 165.752, chapter 2, for limits and regulations.)

(64) **The Sunshine Skyway** (Interstate 275/U.S. Route 19) crosses lower Tampa Bay from Maximo Point to Terra Ceia Island. It is a landfilled causeway for the greater part of its length with bridge spans over the channels which it crosses. The high-level 974-foot fixed span over the main ship channel in the middle of the bay has a clearance of 175 feet. The clearances of the other bridge spans are given in the description of the channels which they cross.

(65) **Tides and currents.**—The diurnal range of tide in Tampa Bay is about 2.2 feet. (See the Tide Tables for predictions.) A strong offshore wind sometimes lowers the water surface at Tampa and in the dredged channels as much as 4 feet, and retards the time of high water by as much as 3 hours. A continued SW wind raises the water by nearly the same amount and advances the time of high water by as much as 1 hour.

(66) Daily tidal current predictions for Tampa Bay Entrance are given in the Tidal Current Tables, and predictions for several places in Tampa Bay and vicinity may be obtained in those tables. There is a large daily inequality in the ebb, and velocities of 2 knots or more may be expected at the strength of the greater ebb of the day in Egmont Channel, Passage Key Inlet, and off Port Tampa. Flood velocities seldom exceed 2 knots. Winds have considerable effect in modifying the tidal current. Actual real-time information on wind direction and velocity, tidal height, and current direction and velocity at several locations on Tampa Bay may be obtained 24 hours a day by calling PORTS (Physical Oceanographic Real Time System) at 727-822-0022 or 727-822-5836.

(67) At a location 6.7 miles W of Egmont Key Light, the tidal current is rotary, turning clockwise, and has considerable daily inequality. The strengths of the greater floods and ebbs set N and S, respectively. Four days of current observations at this location during a period of moderate N winds indicated a resultant nontidal current of 0.4 knot setting S.

(68) **Weather.**—Mild winters and warm summers characterize the maritime subtropical climate of Tampa Bay. The outstanding summer feature is the thunderstorms, which occur on an average of 86 days, mostly in the late afternoons or evenings during June, July, August, and September. These showers often help cool things off as Tampa records 86 days annually with readings of 90°F or more.

(69) The average annual temperature at Tampa is 72.7°F. The average annual maximum is 81.8°F while the average annual minimum is 63.1°F. July and August are the warmest months with an average temperature of 82.6°F and January is the coolest month with an average temperature of 60.5°F. The warmest temperature on record at Tampa is 99°F recorded in June 1985 and the coolest temperature on record is 18°F recorded in December 1962. Every month except December through February, has had a maximum of 90°F while each month, November through March, has had temperatures below freezing. Only about three days each winter season sees temperatures below freezing.

(70) The average annual precipitation at Tampa is 46.79 inches (1188.5 mm). August is the wettest month averaging nearly 8 inches (203 mm) while November is the driest month averaging less than two inches (51 mm). Greater than 40% of the average annual precipitation falls during the summer months of June, July, and August. The greatest precipitation event in 24 hours occurred in May 1979 when 11.45 inches (290.8 mm) fell. Snow has fallen in each month, December through March, but the greatest 24-hour snowfall is less than one inch.

(71) While tropical cyclones are likely from June through November, the Tampa Bay area seems most vulnerable in June and October, although this region has been one of the least active hurricane spots along the W coast. There is about 1 chance in 20 that a hurricane will strike the Tampa Bay area in any given year. The worst storm to strike the area occurred in September 1848. It drove tides 15 feet above mean low water and was followed less than 3 weeks later by another storm that produced 10-foot tides. The Labor Day Hurricane of 1935 brought 5-minute winds of 64 knots to the area.

(72) Cold fronts may bring one or two freezes per winter to the area, although snowfall is negligible and below freezing temperatures are rare. These fronts may produce showers and strong, gusty winds; gales remain infrequent. The flat terrain aids in the formation of nighttime ground fogs during the cool-weather



season. They form on about 3 to 6 nights per month in winter, but usually dissipate during the morning hours.

(73) The National Weather Service office is at Ruskin; **barometers** may be compared there or by telephone. (See appendix for address.)

(74) (See page T-3 for **Tampa climatological table**.)

(75) **Pilotage, Tampa Bay.**—Pilotage is compulsory for all foreign vessels drawing 7 feet or more. It is optional for U.S. vessels sailing coastwise under license and enrollment which have on board a pilot licensed by the Federal Government. Pilotage is available from Tampa Bay Pilots, 1825 Sahlman Drive, Tampa, Florida, 33605; telephone 813-247-3737; FAX 813-247-4425; telex 441350. Copy all ETAs to Tampa Bay Pilots by telex or FAX. The office is in Tampa. The pilot station is mid-length of Egmont Key. Pilot boat MANATEE is 50-foot, and EGMONT and DESOTO are 60-foot. All boats have black hulls and white deckhouses.

(76) The pilot station monitors channels 16, 10, 12 and 13, works on 10, 12 and 13 (call KAW-767); the boats monitor 16, 10, 12, and 13, work on 10, 12 and 13. The pilot office monitors VHF-FM channel 10.

(77) Pilots board vessels day and night, usually in Egmont Channel. Vessels are requested to enter Egmont Channel and proceed inbound, for pilot boarding between Egmont Channel Lighted Whistle Buoy 9 and Lighted Buoy 10. Vessels are requested to maintain 10 knots for pilot boarding and to have pilot ladder 2.5 meters (8.2 feet) above water, and rigged according to SOLAS and IMCO specifications. A heaving line is requested at the ladder, to lift the pilot's gear on board. All vessels should be ballasted to ensure that propeller and rudder are submerged and that visibility over bow is sufficient.

(78) If weather permits, vessels entering by Southwest Channel are usually boarded at Southwest Channel Entrance Lighted Bell Buoy. If weather prohibits boarding at Buoy 1, vessels are boarded in the vicinity of Southwest Channel Lighted Bell Buoy 3.

(79) **Notice of Arrival Time.**—Vessels are requested to give 24-hour and 4-hour notice of their estimated time of arrival (ETA) at the sea buoy (Tampa Bay Lighted Whistle Buoy T). Length, beam, and maximum channel speed and draft of the vessel should be provided with the first notification. Vessels are requested to update their ETA at the sea buoy at the earliest possible time should the ETA change. Vessels are normally not moved in dense fog, and during strong northwest winds, vessels are boarded inside Egmont Key.

(80) A 2-hour minimum advanced notice of arrival or departure every Sunday is essential for vessels constrained by draft in Tampa Bay due to the arrival and departure of the cruise ship SENSATION. The Tampa Bay Vessel Traffic Advisory System (VTAS-Call Sign WHX 362), monitors VHF-FM channel 12.

(81) **Towage.**—The Port of Tampa has two towing companies with tugs up to 6,700 hp. Some tugs are equipped for firefighting. Large vessels usually require at least two tugs. Arrangements for tugs are usually made in advance by ships' agents.

(82) The Port of Tampa is a **customs port of entry**.

(83) **Quarantine, customs, immigration, and agricultural quarantine.**—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(84) Quarantine is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) Vessels are usually boarded at their berths. Tampa has several public and private hospitals with ample facilities.

(85) **Coast Guard.**—A **Marine Safety Office** is in Tampa. (See appendix for address.)

(86) **Harbor regulations.**—The Port of Tampa is under the direction of the Tampa Port Authority and includes Tampa proper, Port Tampa, Big Bend, and the mouth of the Alafia River. The Authority is composed of a five-member board appointed by the Governor of Florida. The board appoints a Port Manager to administer the regulations established by the Authority. The Authority publishes an Operations Manual, a Port Directory, and a Terminal Map which includes additional port information. (Address: P.O. Box 981, Tampa, Fla. 33601; telephone (813-248-1924).) There is a **harbormaster**; telephone (813-248-1924). The Authority maintains a patrol craft

(87) **Charts 11415, 11416.**—**Mullet Key**, on the N side of the entrance to Tampa Bay, is low and wooded. The fishing pier on the SE side of the key has a depth of about 10 feet at the face. A large pile of rocks, covered 2 feet, is to the N and nearly in line with the face of the pier. These rocks are a danger for vessels landing with a strong flood current but are usually marked by tide rips except at slack water.

(88) Old Fort DeSoto and a concrete and shell tower, about 25 feet high, at the S end of the key, and a water tank on St. Jean Key are conspicuous. **Fort DeSoto Park** includes Mullet Key, **St. Jean Key**, **St. Christopher Key**, and **Madelaine Key**, which are connected with the mainland by the Pinellas Bayway. An 800-foot-long T-head fishing pier with a pavilion and a toll house on it extends into the Gulf from in front of the fort; two private, fixed red lights mark the end of the pier. The park has picnic areas, restrooms, bathhouses, surfaced launching ramps, and several large parking areas.

(89) **Manatee River** empties into the S side of Tampa Bay just E of Anna Maria Sound. The river width varies from 0.5 mile to nearly 1 mile for about 10 miles above the mouth, thence from 80 to 600 feet for some 8 miles to Rye. The river is well protected from all directions and affords good storm anchorage for small boats.

(90) In Manatee River, a channel with several dredged sections leads from the entrance to Mitchellville Bridge at Rye, 18.6 miles above the mouth. In 1995, the centerline controlling depths were 6½ feet to Daybeacon 31 near Rocky Bluff, then 4 feet to the highway (I-75) bridge. Snags and debris obstruct the river above Rocky Bluff. A light marks the entrance, and the channel is marked by lighted ranges, lights, and daybeacons as far as Ellenton.

(91) A fish haven, marked by two private daybeacons, is on the N side of the river off Emerson Point.

(92) **Bradenton**, a winter resort on the S side of the river 4.5 miles above the mouth, is the seat of Manatee County and the largest town on the river. Bradenton has a large municipal pier close W of the first highway (U.S. Route 41) bridge with berthing space for larger vessels along the end and numerous berths for small craft inside the pier head. In April 1982, depths of 10 feet were reported in the approach channel with 8 feet reported alongside the berths. Water and electricity are available. The **harbormaster** lives aboard a yacht at Slip No. 27. Radio station, WTRL, occupies the building on the pierhead.

(93) The town has numerous stores, several hotels, and a hospital. The Sarasota-Bradenton Municipal Airport is about 6 miles S of the city. Local guides can be obtained as pilots.

(94) **DeSoto National Memorial** of the National Park Service is on **DeSoto Point**, on the S side of the river entrance. A marina

and boatyard are in a basin protected by an L-shaped concrete pier about 0.5 mile W of the point. Berths, electricity, water, ice, and limited marine supplies are available. The larger of two marine railways at the yard can handle craft to 50 feet; hull, engine, and electronic repairs can be made.

(95) Three bridges cross Manatee River at Bradenton. The first, U.S. Route 41 fixed highway bridge close E of the municipal pier, has a clearance of 41 feet. The second bridge across the river, the Seaboard System Railroad (SCL) bridge 500 yards above the highway bridge, has a bascule span with a clearance of 5 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) The third, U.S. Route 301 highway bridge about 500 yards above the railroad bridge, has a fixed span with a clearance of 40 feet.

(96) **Emerson Point** is on the N bank at the entrance to the river at the W end of **Snead Island**. **McKay Point** is on the S shore of the island about 1.5 miles E of Emerson Point. A marina and boatyard in a protected privately dredged basin on the E side of McKay Point has two marine railways and 60- and 20-ton mobile hoists. Craft up to 80 feet can be handled for hull and engine repairs or dry open storage. Gasoline, diesel fuel, water, marine supplies, and some berths with electricity are available. In April 1982, there was reported to be 8 feet in the privately marked approach channel and in the basin.

(97) A **special anchorage** is on the N side of the river just E of the entrance to the marina and boatyard on McKay Point. (See **110.1 and 110.74a**, chapter 2, for limits and regulations.)

(98) A dredged cutoff channel at the E end of Snead Island leads into Terra Ceia Bay from Manatee River. Daybeacons mark each end of the cutoff channel. In April 1982, a reported depth of 3 feet was available in the cut N into Terra Ceia Bay. Gasoline is available at several facilities along the cutoff. A highway bridge over the cutoff has a 33-foot fixed span with a clearance of 13 feet. An overhead power cable crossing close NE of the bridge has a clearance greater than that of the bridge.

(99) A marina is in the lagoon E of the cutoff (27°31.5'N., 82°36.5'W.). The privately marked entrance channel had a reported controlling depth of 4 feet in January 1999. There is a marine railway for craft up to 40 tons. Engine repairs open or covered storage, water, open and covered berths with electricity, and marine supplies are available.

(100) **Palmetto** is on the opposite side of Manatee River from Bradenton. **Ellenton** is on the N bank of the river 2 miles above the Seaboard System Railroad bridge. All three towns have rail and highway connections to all parts of the State. Manatee County is an important center for the raising of citrus fruits and vegetables. A marina at the Palmetto pier provides gasoline, diesel fuel, electricity, water, ice, marine supplies, and provisions. Hull and engine repairs can be made. A restaurant is on the end of the pier. The marina monitors VHF-FM channel 16. The entrance channel to the marina, marked by private daybeacons, had a reported depth of 8 feet in 1984. Pilings of a former pier extend 250 yards from shore W of the Palmetto pier.

(101) There is a small marina in a small basin at **Rocky Bluff**, about 1.5 miles E of Ellenton. In April 1982, a reported depth of about 2½ feet could be carried to the facility. Gasoline, berths, a launching ramp, provisions, and water are available. Interstate Route 75 twin fixed highway bridges with a clearance of 40 feet cross the river at Rocky Bluff. An overhead power cable with a clearance of 49 feet crosses the river at Rocky Bluff.

(102) Manatee Memorial Hospital is a large white building in **Manatee** on the S bank of the river E of Bradenton. There is a large seafood packing and canning plant at Manatee.

(103) **Braden River** empties into Manatee River about 2 miles above the upper highway bridge at Bradenton. In 1972, the river had a reported controlling depth of 1 foot to a point about 2 miles above the highway bridge. The channel is unmarked, and there are many shoals. State Route 64 highway bridge over Braden River has a 45-foot fixed span with a clearance of 8 feet at the center. Overhead power cables 0.1 mile and 0.6 mile above the bridge have clearances of 32 and 31 feet, respectively.

(104) **Terra Ceia Bay**, just N of Manatee River on the SE side of Tampa Bay, may be entered from Manatee River through the cutoff between Snead Island and the mainland. In February 1999, there was a reported channel depth of 3 feet.

(105) The other entrance to Terra Ceia Bay from Tampa Bay is the narrow and generally crooked channel between Snead Island and **Rattlesnake Key**. The channel is marked by a light at the entrance and by daybeacons and has a reported depth of about 4 feet. Local knowledge is advised. The Sunshine Skyway crosses the head of the bay on a highway bridge that has a 44-foot fixed span with a clearance of 10 feet. Overhead power and telephone cables close SW of the bridge have a least clearance of 29 feet.

(106) There is a boat ramp at the head of **Bishop Harbor**, about 7 miles NE of the entrance to Manatee River.

(107) **Port Manatee** (27°38.0'N., 82°33.7'W.), owned by the Manatee County Port Authority, is a deepwater terminal on the SE side of Tampa Bay, about 11 miles above Egmont Key. The terminal is reached through a dredged channel that leads SE from the main ship channel about 4 miles NE of the Sunshine Skyway Bridge to a turning basin at Port Manatee. A Federal project provides for a depth of 40 feet in the channel and turning basin. (See Notice to Mariners and latest edition of chart for controlling depths.) The channel is marked by a **127.7°** lighted range, lights, and lighted buoys.

(108) **Towage**.—Tugs to 6,000 hp are based at Port Manatee. Larger tugs to 6,700 hp are based at Tampa.

(109) **Wharves**.—There are nine deep-draft facilities at Port Manatee. General cargo is usually handled by ships' tackle. All the facilities have highway connections and three have rail connections. Bunkering is available at five facilities. Electrical shore power and water connections are available at each ship berth. For a complete description of the port facilities refer to Port Series No. 17, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths are reported; for information on the latest depths contact the operator.

(110) Manatee County Port Authority Berth No. 11 (27°37'56"N., 82°33'49"W.): 480-feet of berthing space along platforms; 40 feet alongside; deck height, 8 feet; receipt and shipment of containerized and conventional general cargo, and petroleum products; receipt of fruits, vegetables and automobiles; bunkering vessels; mooring vessels; operated by Manatee County Port Authority, Del Monte Tropical Fruit Co. and Coastal Fuel Marketing, Inc.

(111) Manatee County Port Authority Berths Nos. 9 and 10: S side of basin; 1,200 feet of berthing space; 40 feet alongside; deck height, 8 feet; 200 acres open storage; storage tanks for 2 million barrels; receipt and shipment of containerized and conventional general cargo, petroleum products, and juice concentrate; receipt of automobiles; mooring cruise ships; bunkering vessels; operated by Manatee County Port Authority; Juice

Farms, Inc.; Tropicana Products, Inc.; and Coastal Fuels Marketing, Inc.

(112) Manatee County Port Authority RO-RO Berth 8A (27°38'01"N., 82°33'32"W.): 1,300 feet of berthing space along Berths 9 and 10; 40 feet alongside; deck height, 4 to 8½ feet; receipt and shipment of roll-on, roll-off general cargo; operated by Manatee County Port Authority.

(113) Manatee County Port Authority Berth No. 8 (27°38'03"N., 82°33'32"W.): 506-foot face; 40 feet alongside; deck height, 8 and 7 feet; 115,000 square feet covered storage; receipt and shipment of general cargo and petroleum products; receipt of cement and asphalt; bunkering vessels at berth; various operators.

(114) Manatee County Port Authority Berth No. 7 (27°38'06"N., 82°33'36"W.): 720 feet of berthing space; 40 feet alongside; deck height, 8 feet; two fixed tower shiploaders with conveyor boom loading 950 tons per hour; cement clinker with 400 to 800 tons per hour unloading rate; receipt and shipment of miscellaneous dry bulk commodities and petroleum products; receipt of asphalt and cement; various operators.

(115) Manatee County Port Authority Berth No. 6 (27°38'06"N., 82°33'42"W.): 412 feet of berthing space; 40 feet alongside; deck height, 8 feet; 34,000 square feet of covered storage; receipt and shipment of conventional general cargo and automobiles in foreign and domestic trades; receipt of fruits, vegetables, and bananas; operated by Manatee County Port Authority and Banana Services, Inc., d.b.a Banacol.

(116) Manatee County Port Authority Berth No. 5 (27°38'10"N., 82°33'48"W.): 563 feet of berthing space; 13 to 18 feet alongside; deck height, 6 feet; open storage area for approximately 10,000 tons; receipt of sand and gravel; operated by Manatee County Port Authority.

(117) All types of marine supplies are available at Tampa. Deep-draft vessels are usually bunkered at berth by barge. All types of hull and engine repairs can be made at Tampa.

(118) **Piney Point** is a small projection on the SE side of Tampa Bay about 0.3 mile N of Port Manatee Terminal. An abandoned ferry slip is on the point.

(119) **Little Manatee River** empties into the SE side of Tampa Bay opposite St. Petersburg. The crooked channel across the bar at the mouth of the river is marked by a light and daybeacons. The controlling depth in the privately maintained channel to the railroad bridge, about 2.3 miles above the mouth, is about 3 feet. The channel, marked by private daybeacons, is difficult to follow without local knowledge. About 1.5 miles above the entrance to Little Manatee River, another privately maintained channel with a depth of about 3 feet leads through **Ruskin Inlet (Marsh Branch)** to the highway bridge at **Ruskin**. The bridge has a 25-foot fixed span with a clearance of 12 feet.

(120) At **Shell Point**, on the N side of the entrance to Little Manatee River, is a fish camp with a small wharf. A launching ramp, water, ice, and provisions are available. A railroad bridge with a 35-foot swing span and a clearance of 4 feet crosses the river about 2.3 miles above the mouth. (See **117.1 through 117.59 and 117.297**, chapter 2, for drawbridge regulations.) U.S. Route 41 highway bridge with twin fixed spans and clearances of 22 feet crosses the river close S of the railroad bridge. The E span of a former highway swing bridge, immediately S of the fixed spans, remains as a fishing pier. The overhead power cables at the bridge have a minimum clearance of 58 feet.

(121) **Bahia Beach**, about 0.6 mile NE of Shell Point, is a settlement with dredged lagoons for waterfront homesites. A channel marked by private daybeacons, with a reported controlling depth of 6 feet in June 1985, leads to a marina at the head of the lagoons. A 20-ton mobile hoist that can handle craft up to 45 feet for hull and engine repairs, or dry open or covered storage is available. Electronic repairs can be made. Gasoline, diesel fuel, water, ice, a launching ramp, marine supplies, and open and covered berths with electricity are available. A motel dock, also at the head of the channel, has berths for transients.

(122) **Apollo Beach**, about 3½ miles NE of **Mangrove Point** on the E shore of Tampa Bay, is another waterfront development with lagoons and waterfront homesites. A **special anchorage** is on the N side of the harbor at Apollo Beach. (See **110.1 and 110.74b**, chapter 2, for limits and regulations.)

(123) **Chart 11416.—Hillsborough Bay**, the NE arm of Tampa Bay, is 8 miles long and 4 to 5 miles wide. A Federal project provides for depths of 43 feet in the channels leading through Hillsborough Bay. (See Notice to Mariners and latest edition of chart for controlling depths.) The main ship channel follows a dredged cut up the middle of the bay to Tampa. Spoil banks border the E side of the channel for most of its length. Good anchorage is available for shallow-draft vessels in the central part of the bay W of the main channel.

(124) At the turn in the main ship channel SE of Gadsden Point, Big Bend channel leads E to a turning basin and chemical plant, thence S to a powerplant wharf at **Big Bend**. In November-December 1992, the controlling depths were 29 feet (34 feet at midchannel) in the channel, thence depths of 13 to 38 feet in the turning basin and 33 feet alongside the powerplant wharf. The channel is privately marked by lighted ranges and lighted and unlighted buoys. Coal for powerplant consumption is unloaded from barges at the powerplant wharf.

(125) Two miles N from the sharp turn in the main channel, Alafia River channel leads E to **Alafia River**. Federal project depth for the channel is 30 feet from the ship channel in Hillsborough Bay to and including the turning basin at **East Tampa**, the site of a large chemical plant, on the N side of Alafia River 0.5 mile above the mouth. The channel is well marked and is subject to frequent shoaling. Check with Tampa Bay pilots for current allowable drafts. (See Notice to Mariners and latest editions of charts for controlling depths.)

(126) Deep-draft facilities at Big Bend on the Alafia River are described under wharves at Tampa later in this chapter.

(127) A draft of about 3 feet can be taken for about 8 miles up Alafia River at high water with local knowledge. A highway bridge, about 1 mile above the mouth of the river, has a 44-foot fixed span with a clearance of 28 feet; the nearby overhead power cables have a clearance of 33 feet. The railroad bridge just above the highway bridge has a 40-foot swing span with a clearance of 6 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) The minimum clearance of the overhead power and telephone cables crossing the river above these bridges is 31 feet. Twin fixed highway bridges 2.8 miles above the entrance have a clearance of 28 feet. A fixed highway bridge about 4.0 miles above the entrance has a clearance of 14 feet.

(128) **Manatees**.—Regulated speed zones for the protection of manatees are in the lower mile of Alafia River and in the approach to the river from the main channel through Hillsborough Bay. (See Manatees, chapter 3.)



(129) Small-craft facilities on the Alafia River include a boatyard on the S side of the river about 0.2 mile E of the railroad bridge that has a 5-ton crane, and another marina on the S side of the river about 1.8 miles above the railroad bridge. These facilities can provide berths, gasoline, water, ice, launching ramps, and hull and engine repairs.

(130) The boat basin for **MacDill Air Force Base** on the W side of Hillsborough Bay about 2 miles N of **Gadsden Point** (27°49.3'N., 82°28.5'W.), is entered through a dredged channel marked by a light, daybeacons, and a **282°** unlighted range. In March 1999, a midchannel controlling depth of 13 feet was reported in the channel and a controlling depth of 7 feet was reported in the basin.

(131) The MacDill AFB marina, about 0.5 mile W of Gadsden Point, is entered from Tampa Bay through a privately marked channel. In July 1987, the channel had a reported depth of 7 feet.

(132) **Port Sutton** is on the E side of Hillsborough Bay just N of **Pendola Point** (27°54.0'N., 82°26.0'W.). A dredged channel leads NE from the main ship channel to a turning basin and slip at Port Sutton, the site of large power, chemical, and cement plants, and a scrap metal wharf. The stack atop the powerplant is floodlighted at night.

(133) A Federal project provides for depths of 43 feet in the Port Sutton Entrance Channel, Port Sutton Turning Basin, East Bay Channel, East Bay Turning Basin, and 34 feet in Upper East Bay. (See Notice to Mariners and latest edition of chart for controlling depths.) The entrance channel is marked by a **054.1°-234.1°** lighted range, lights, and lighted buoys. In addition to several barge wharves, Port Sutton has eight deep-draft wharves which are described later in this chapter under Tampa wharves.

(134) **East Bay**, immediately N of Port Sutton on the E side of **Hookers Point**, is a dredged basin with depths of about 32 feet. The Tampa Port Authority is developing port facilities on the west side of the bay.

(135) **McKay Bay**, about 1.3 miles N of Port Sutton, is a shallow bay about 1 mile wide and 1.5 miles long. The 22nd Street highway causeway across the bay entrance has twin fixed spans with clearances of 40 feet. Overhead power and telephone cables close N of the causeway have clearances of 32 feet. About 0.3 mile N of the bridge is an overhead power cable with a clearance of 40 feet.

(136) **Tampa** is an important manufacturing, shipping, and distribution center at the head of Tampa Bay. It has an expanding economy and sizable cigar, lumber, phosphate, and manufacturing industries. There is considerable foreign and domestic trade in shipments of phosphate rock, petroleum, liquid sulfur, cement, chemicals, cattle, bananas, citrus fruits, grain, scrap iron, machinery, and general cargo. The University of Southern Florida is at the N end, and the University of Tampa is on the W bank of the Hillsborough River in the city.

(137) **Channels.**—The main ship channel leads into Tampa Harbor along the E side of **Davis Islands**. The channel divides off the S end of **Harbour (Seddon) Island**; **Seddon Channel** continues NW to a turning basin at the mouth of Hillsborough River, and **Sparkman Channel** leads N to the **Ybor Turning Basin** at the end of **Ybor Channel**. **Garrison Channel**, an E-W channel between Harbour Island and the Tampa waterfront, connects the two turning basins.

(138) A Federal project provides for depths of 34 feet for the main ship channel, Sparkman and Ybor Channels, and Ybor Turning Basin, and 12 feet for Seddon and Garrison Channels.

(See Notice to Mariners and latest editions of charts for controlling depths.)

(139) A fixed highway bridge about midlength of Garrison Channel has a clearance of 10 feet. Another fixed highway bridge near the W end of the channel has a clearance of 10 feet.

(140) A **barge anchorage** is close off the SE side of Davis Islands. (See **110.1 and 110.193 (a)(5)**, chapter 2, for limits and regulations.)

(141) Only small boats can pass around the N end of Davis Islands. Two fixed highway bridges, about 100 yards apart, connect the N end of the islands with Tampa to the W; minimum width is 34 feet, minimum clearance is 9 feet.

(142) A **no-wake speed zone** is enforced in the area between the southern tip of Harbour Island and Platt Street bridge.

(143) Information on anchorages, tides, currents, pilotage, towage, quarantine, customs, immigration, agricultural quarantine, and harbor regulations can be found at the beginning of this chapter under general information for Tampa Bay.

(144) **Wharves.**—Deep-draft facilities at Tampa are located at Big Bend, East Tampa (Alafia River), Port Sutton, Port Tampa, and Tampa proper. Most of the facilities have railroad and highway connections, and water and electrical shore power connections. A total of over 14 million cubic feet of freezer and cooler space is available at the port. General cargo is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility. Shore-based mobile cranes up to 150 tons can be rented, and floating cranes to 100 tons are available. Only the deep-draft facilities are described; other active facilities are for barges, tugs, fishing boats, and other small vessels. For a complete description of the port facilities refer to Port Series No. 17, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths are reported; for information on the latest depths contact the operator.

(145) The office of the Tampa Port Authority is at the George B. Howell Maritime Center Wharf, 1101 Channelside Drive, Tampa, FL 33602; telephone 813-805-5104, FAX 813-905-5048.

#### (146) **Facility at Big Bend:**

(147) IMC-Agrico Co., Big Bend Terminal Dock (27°48'22"N., 82°24'30"W.): E side of basin; 1,500-foot face; 35 feet alongside; deck height, 10 feet; one gantry shiploader, 3,000-ton-per-hour capacity; shipment of wet phosphate rock, superphosphate, and phosphoric acid; owned and operated by IMC-Agrico Co.

#### (148) **Facilities at East Tampa (Alafia River):**

(149) Cargill Fertilizer, Riverview Wharf and Slip (27°51'34"N., 84°23'30"W.): E and W sides of slip, each 448 feet long, 25 feet alongside; 500-foot wharf adjacent to W side of slip, 29 to 31 feet alongside; deck heights, 8 feet; gantry shiploader with hinged-conveyor boom, 800 and 600-ton-per-hour capacity; covered storage for 180,000 tons of bulk material; shipment of phosphate rock, bulk phosphate products, and animal feed; owned and operated by Cargill Fertilizer, Inc.

(150) Cargill Fertilizer, Riverview Liquid Products Wharf (27°51'27"N., 84°23'32"W.): offshore wharf, 900 feet of berthing space with dolphins; 34 feet alongside; deck height, 8 feet; one loading arm; pipelines extend to storage tanks, total capacity 5.5-million gallons, 2.8-million gallons of phosphoric acid, 1.3-million gallons of sulfuric acid; receipt and shipment of sulfuric acid, receipt of liquid sulphur, and shipment of phosphoric acid; owned and operated by Cargill Fertilizer, Inc.

#### (151) **Facilities at Port Sutton, S side of slip:**

(152) Tampa Port Authority Berth 31 (27°54'12"N., 82°26'00"W.): 1,000 feet of berthing space with four sets of mooring dolphins; 39 feet alongside; deck height, 8½ feet; handles discharge of cement and other bulk commodities and used as a lay berth; owned by Tampa Port Authority and operated by Vulcan/ICA Distribution Co. and Southdown, Inc.

(153) Martin Gas Sales, Tampa Terminal, Berth 24 (27°54'11"N., 82°24'56"W.): 715 feet of berthing space with dolphins; 33 feet alongside; deck height, 8 feet; two loading arms; pipelines extend to storage tanks, total capacity 310,000 barrels; receipt and shipment of petroleum products, sulfuric acid, and asphalt; fueling vessels; owned by Tampa Port Authority and operated by Martin Gas Sales, Inc.

(154) Martin Gas Sales, Tampa Terminal, Berth 24B (27°54'11"N., 82°24'52"W.): 200 feet of berthing space with dolphins; 12 to 20 feet alongside; deck height, 8 feet; hydraulic, mast-and-boom derrick with 40-foot boom; pipelines extend to storage tanks, total capacity 310,000 barrels; receipt and shipment of petroleum products; loading bunkering barges; fueling vessels; owned by Tampa Port Authority and operated by Martin Gas Sales, Inc. and Central Oil Co., Inc.

(155) Pakhoed Port Sutton Dock: about 600 yards W of head of slip; 1,000 feet of berthing space with dolphins; 32 feet alongside; deck height, 12 feet; 80-ton crawler crane; loading tower with 600-ton-per-hour capacity; covered storage for 170,000 tons of material; receipt and shipment of fertilizer materials and other bulk materials, receipt of caustic soda; owned and operated by Pakhoed, Inc.

(156) Freeport Sulphur, Tampa Terminal, Berth 22 (27°54'13"N., 82°24'38"W.): 700 feet of berthing space with dolphins; 32 feet alongside; deck height, 10 feet; two unloading arms; pipelines extend to storage tanks, total capacity 12.9-million gallons for liquid sulphur and 1.9-million gallons for liquid fertilizer; owned by Tampa Port Authority and operated by Freeport Sulphur Co., Division of Freeport McMoRan Resource Partners LP; and Hydro Agri North America, Inc.

(157) Marathon Asphalt, Tampa Terminal, Berth 21 (27°54'12"N., 82°24'32"W.): 230 feet of berthing space with dolphins; 18 to 19 feet alongside; deck height, 8 feet; storage tanks, 122,900-barrel-capacity; receipt of asphalt; owned by Tampa Port Authority and operated by Marathon Asphalt Co.

(158) **Facilities at Port Sutton, N side of slip:**

(159) IMC-Agrico Co., Port Sutton Terminal, Ammonia Wharf (27°54'16"N., 82°25'03"W.): 800 feet of berthing space with dolphins; 33 feet alongside; deck height, 6 feet; storage tank for 17.5-million gallons of anhydrous ammonia; receipt of anhydrous ammonia; mooring vessels; owned and operated by IMC-Agrico Co.

(160) IMC-Agrico Co., Port Sutton Terminal, Phosphate Wharf (27°54'16"N., 82°25'13"W.): 800 feet of berthing space; 34 feet alongside; deck height, 10 feet; loading tower, capacity, 2,200 tons per hour for phosphate rock and 1,100 tons per hour for superphosphate; open storage for 200,000 tons of wet phosphate; silo storage for 60,000 tons of dried phosphate rock; shipment of phosphate rock, triple superphosphate, diammonium phosphate, and animal feed (defluorinated phosphate); owned and operated by I.M.C. Corp.

(161) Farmland Hydro LP, Tampa Ammonia Terminal Wharf (27°54'16"N., 82°25'26"W.): 650 feet of berthing space with dolphins; 33 feet alongside; deck height, 7 feet; pipeline extends to storage tank, 17.2-million gallon capacity; receipt of anhydrous

ammonia; owned by Packhoed Dry Bulk Terminals, Inc., and operated by Farmland Hydro LP.

(162) Pasco Terminals, Tampa Terminal, Berth 2 (27°54'23"N., 82°25'40"W.): 500-foot face; 30 feet alongside; deck height, 7½ feet; pipeline extends to storage tanks, 8.3-million gallon capacity; receipt of liquid sulfur; owned by Tampa Port Authority, and operated by Pasco Terminals, Inc.

(163) Commercial Metals Co., Berth 1 (27°54'25"N., 82°25'43"W.): 530-foot face; 29 feet alongside; deck height, 7½ feet; three cranes to 50 tons with electromagnets; open storage for 14,000 tons; shipment of scrap metal; owned by Tampa Port Authority, and operated by Commercial Metals Co.

(164) Tampa Electric Co., Gannon Station, Coal Dock (27°54'31"N., 82°25'37"W.): 750 feet of berthing space with 31 feet alongside; 450-foot face with 31 feet alongside; extreme shoaling on N side of slip; handles discharged of coal; owned and operated by Tampa Electric Co.

(165) **Facilities in East Bay:**

(166) CSX, Rockport Terminal Dock (27°54'53"N., 82°25'26"W.): 1,460 feet of berthing space; 41 feet alongside; deck height, 12 feet; 3,000-ton-per-hour gantry shiploader; covered storage for 110,000 tons of material; shipment of phosphate products; owned and operated by CSX Transportation, Inc.

(167) Eastern Associated Terminals Co. Wharf (27°55'11"N., 82°25'15"W.): 555 feet of berthing space; 39 feet alongside; deck height, 10 feet; 2,200-ton-per-hour gantry shiploader; open storage for 135,000 tons, covered storage for 110,000 tons; shipment phosphate products; owned and operated by Eastern Associated Terminals Co.

(168) Tampa Port Authority, Holland Terminal, Berth 201 (27°55'52"N., 82°26'02"W.): 903 feet of berthing space; 34 feet alongside; deck height, 11½ feet; 12.5 acres of open storage; 85,000 square-foot covered storage; owned by Tampa Port Authority and operated by Tampa Bay International Terminals, Inc., and Thompson Shipping.

(169) Tampa Port Authority, Holland Terminal, Berth 202 (27°55'52"N., 82°26'02"W.): 750 feet of berthing space; 34 feet alongside; deck height, 11½ feet; about 15.5 acres of open storage; receipt and shipment of containerized and conventional cargo in foreign and domestic trades; mooring cruise vessels; owned by Tampa Port Authority and operated by Carnival Cruise Lines; Tampa Bay International Terminals, Inc., and Thompson Shipping.

(170) CF Industries Tampa Phosphate Terminal Wharf: Berth 204: 500 yards SE of Berth 202; 920 feet of berthing space with platforms; 34 feet alongside; deck height, 10 feet; loading tower with average loading capacity of 1,300 tons per hour; covered storage for 75,000 tons of material; shipment of phosphate fertilizer products; owned by Tampa Port Authority and operated by CF Industries, Inc.

(171) Tampa Port Authority Holland Terminal, Berth 205 (27°55'30"N., 82°25'45"W.): 580 feet of berthing space; 206-foot face; deck height, 8½ feet; 34 feet alongside; receipt of juice concentrate; owned by Tampa Port Authority and operated by Tampa Port Authority and Interamerican Juice Co., Inc.

(172) Tampa Port Authority, Holland Terminal, Berth 206 (27°55'25"N., 82°25'44"W.): 850 feet of berthing space; 17 to 20 feet alongside; mooring vessels; owned by Tampa Port Authority and operated by International Ship Repair and Marine Services, Inc.

(173) Tampa Port Authority, Holland Terminal, Berth 208 (27°55'15"N., 82°25'43"W.): 907 feet of berthing space; 33 feet



alongside; deck height, 11½ feet; 140-ton and 300-ton cranes; 20 acres open storage; wharf is in line and contiguous with Berths 209, 210, and 211; receipt and shipment of containerized, conventional, and roll-on/roll-off general cargo and heavy-lift items in foreign and domestic trades; owned by Tampa Port International Terminals, Inc.

(174) Tampa Port Authority, Holland Terminal Berth 209 (27°55'06"N., 82°25'43"W.): 600 feet of berthing space; 34 feet alongside; deck height, 11½ feet; 140-ton and 300-ton cranes; wharf is in line and contiguous with Berths 208, 210 and 211; receipt and shipment of conventional general cargo in foreign and domestic trades; receipt of tropical fruit; owned by Tampa Port Authority and operated by Tampa Bay International Terminals, Inc., and Harborside Refrigerated Services, Inc.

(175) Tampa Port Authority, Holland Terminal, Berths 210 and 211 (27°54'57"N., 82°25'43"W.): 1,200 feet of berthing space; 35 feet alongside at Berth 210 and 39 feet alongside at Berth 211; deck height, 11½ feet; 140-ton and 300-ton cranes; wharf is in line and contiguous with Berths 208 and 209; receipt and shipment of containerized and general cargo in foreign and domestic trades; receipt of bananas; owned by Tampa Port Authority and operated by Tampa Port Authority; Thompson Shipping; and Harborside Refrigerated Services, Inc.

(176) Tampa Port Authority, Holland Terminal, Berth 212: S end of Berth 211; 750 feet of berthing space; 40 feet alongside; deck height, 11½ feet; receipt and shipment of general and containerized cargo.

**(177) Facilities along W side of Hookers Point:**

(178) Tampa Port Authority, Holland Terminal, Berth 219 (27°54'36"N., 82°26'22"W.): 865 feet of berthing space; 39 feet alongside; 400-foot face; deck height, 11 feet; shipment of scrap metal; receipt and shipment of general cargo; owned by Tampa Port Authority and operated by The David J. Joseph Co.; Tampa Scrap Processors, Inc.; and Winner Metals.

(179) Tampa Port Authority, Holland Terminal, Berth 220 (27°54'45"N., 82°26'28"W.): 1,000 feet of berthing space with dolphins; 39 feet alongside; deck height, 11 feet; electric belt conveyor; pipeline extends to storage tanks, 7.8-million gallon capacity; receipt of sulfuric acid, sand, and gravel; owned by Martin Marietta Materials Co., Inc., and Sulphuric Acid Trading Co.

(180) Tampa Port Authority, Holland Terminal, Berths 223 and 224 (27°55'06"N., 82°26'34"W.): 1,120-foot face; 14 to 34 feet alongside; deck height, 8 feet; pipelines extend to storage tanks with capacity of 3.7-million gallons for caustic soda, and 1.4-million barrels for petroleum products; receipt of caustic soda and petroleum products; mooring vessels; owned by Tampa Port Authority and operated by GATX Terminals Corp.

(181) Tampa Port Authority, Holland Terminal, Berths 226 and 227 (27°55'10"N., 82°26'36"W.): SE and NW sides 880 feet long; 41 feet alongside; deck heights, 8 feet; two hand-operated and two hydraulic derricks; one loading arm; pipelines extend to storage tanks with capacity of 855,000 barrels for petroleum products; receipt of petroleum products, caustic soda, and anhydrous ammonia; owned by Tampa Port Authority and operated by Murphy Oil USA, Inc.; Petroleum Packers, Inc.; Louis Dreyfus Energy; GATX Terminals Corp.; and CF Industries, Inc.

(182) Tampa Port Authority, Holland Terminal, Berth 232 (27°55'16"N., 82°26'45"W.): 140-foot face; 245 feet of berthing space with dolphins; 24 to 29 feet alongside; deck height, 6 feet; fixed loading chute and ramp; covered holding pen for 600 head

of livestock; occasional shipment of cattle; mooring tugs; owned by Tampa Port Authority and operated by Tampa Port Authority and Bay Transportation Corp.

**(183) Facilities along E side of Sparkman Channel:**

(184) Freeport Sulphur Co., Tampa Wharf (27°55'45"N., 82°26'46"W.): 650 feet of berthing space with dolphins; 33 feet alongside; deck height, 8 feet; pipelines extend to tank storage, 12.5-million gallon capacity; receipt of liquid sulfur; owned and operated by Freeport Sulphur Terminals Co., Division of Freeport-McMoRan Resource Partners, LP.

(185) Amoco Oil Co., Tampa Terminal Wharf (27°55'51"N., 82°26'45"W.): 109-foot offshore wharf, 650 feet of berthing space with dolphins; 32 feet alongside; deck height, 7 feet; pipelines extend to storage tanks, 450,000-barrel capacity; receipt of petroleum products; owned and operated by Amoco Oil Co.

(186) Citgo Petroleum, Tampa Terminal Wharf (27°55'58"N., 82°26'46"W.): 240-foot face, 550 feet of berthing space usable with dolphins; 33 feet alongside; deck height, 10 feet; pipelines extend to storage tanks, 762,000-barrel capacity; receipt of petroleum products; owned and operated by Citgo Petroleum Corp.

(187) LaFarge Corp., Tampa Wharf (27°56'07"N., 82°26'42"W.): 1,200 feet of berthing space with dolphins; 34 to 35 feet alongside; deck height, 9 feet; pipeline extends to silos for 89,000 tons; receipt of cement; owned and operated by LaFarge Corp.

(188) Tampa Electric Co., Hookers Point Station Wharf (27°56'16"N., 82°26'39"W.): 570 feet of berthing space with dolphins; 40 feet alongside; deck height, 8 feet; pipelines extend to storage tanks, 270,000-barrel capacity; receipt of fuel oil for plant consumption; owned by Tampa Electric Co.

**(189) Facilities along Ybor Channel and Turning Basin, E side:**

(190) Tampa Port Authority, George B. Howell Maritime Center, Berth 250 (27°56'24"N., 82°26'33"W.): 700-foot face; 22 to 34 feet alongside; deck height, 5 feet; covered storage area with unlimited load capacity; owned and operated by Tampa Port Authority.

(191) Tampa Port Authority, George B. Howell Maritime Center, Berths 251 and 252 (27°56'30"N., 82°26'35"W.): 1,210-foot face; 32 feet alongside; deck height, 5 feet; 39,000 square feet covered storage; ship-loading tower; sixty-five forklift trucks; receipt and shipment of general cargo, including steel and lumber products in foreign and domestic trades; shipment of miscellaneous dry bulk commodities and citrus pellets; owned by Tampa Port Authority and operated by Tampa International Terminals, Inc.

(192) Marathon Oil Co., Tampa Terminal Wharf (27°56'47"N., 82°26'32"W.): 750 feet of berthing space with dolphins; 33 feet alongside; deck height, 6 feet; pipelines extend to storage tanks, 1.2-million-barrel capacity; receipt of petroleum products; owned by Star Enterprise and Marathon Oil Co., and operated by Marathon Oil Co.

(193) Cargill Tampa Grain Elevator Wharf (27°56'53"N., 82°26'31"W.): 756 feet of berthing space with dolphins; 33 feet alongside; deck height, 10 feet; 350-ton-per-hour ship-loading spout; 540-ton-per-hour marine leg; 1-million-bushel grain elevator; covered storage for 701,000 bushels of citrus pellets; receipt and shipment of grain and citrus pellets; owned and operated by Cargill, Inc.

(194) E. A. Mariana Asphalt Co., Tampa Wharf (27°57'01"N., 82°26'30"W.): 410 feet of berthing space; 100-foot face; 16 feet alongside; deck height, 8 feet; extreme shoaling at south end of

berth; receipt of asphalt by small tanker and barge; owned and operated by E. A. Mariana Asphalt Co.

(195) **Amerada Hess Corp., Tampa Terminal Wharf** (27°57'04"N., 82°26'30"W.): 600 feet of berthing space with dolphins; 34 feet alongside; deck height, 9½ feet; pipelines extend to storage tanks, 383,000-barrel capacity; receipt of petroleum products; owned and operated by Amerada Hess Corp.

(196) **Facilities along Ybor Channel, W side:**

(197) **Tampa Port Authority, Metroport Terminal, Berths 263 and 264** (27°57'10"N., 82°26'39"W.): 680 feet long, 25 to 27 feet alongside; head of slip 350 feet long; 20 to 25 feet alongside; deck heights, 10 feet; 1 acre open storage; two mobiles cranes and tow crawler cranes; mooring vessels for repair; mooring floating drydocks; owned by Tampa Port Authority and operated by International Ship Repair & Marine Services.

(198) **Tampa Port Authority, Metroport Terminal, Berths 265 and 266** (27°57'06"N., 82°26'38"W.): channel side at S entrance to slip, 275 feet long; 28 feet alongside; S side of slip, 750 feet long; 18 to 25 feet alongside; deck heights, 10 feet; 1 acre of open storage; two mobiles cranes and tow crawler cranes; mooring vessels for repair; owned by Tampa Port Authority and operated by International Ship Repair & Marine Services, G & C Stevedoring Co., Seagull Terminal & Stevedoring Co., and Metro Stevedores, Inc.

(199) **Tampa Port Authority, Cruise Terminal No. 6, Berths 267 and 268** (27°56'52"N., 82°26'37"W.): 1,200-foot face; 28 feet alongside; deck height, 8 feet; mooring cruise vessels; owned by Tampa Port Authority and operated by Tampa Port Authority and Royal Venture Cruise Line.

(200) **Tampa Port Authority, Garrison Seaport Center Cruise Terminals 1 and 2, Berths 271, 272, 273** (27°56'33"N., 82°26'48"W.): Berths 272 and 273, 1,221-foot face; Berth 271, 548-foot face; 32 feet alongside; deck heights, 7½ feet; mooring cruise vessels; owned and operated by Tampa Port Authority.

(201) **Facilities at Port Tampa Dock** (Slip entrance at 27°51'40"N., 82°33'10"W.):

(202) **Gold Bond Building Products, Tampa Plant Wharf** (27°51'37"N., 82°33'05"W.): 650 feet of berthing space available along dolphins; 34 feet alongside; deck height, 6 feet; self-unloading vessels can use belt conveyor system, unloading rate, 2,000 tons per hour; open storage for 200,000 tons of gypsum rock; receipt of gypsum rock; owned and operated by Gold Bond Building Products, Division of National Gypsum Co.

(203) **Chevron U.S.A. Products Co., Tampa Terminal Dock** (27°51'38"N., 82°32'59"W.): 600 feet of berthing space available with dolphins; 34 feet alongside; deck height, 10 feet; pipelines extend to storage tanks, 837,000-barrel capacity; receipt of petroleum products; owned by Chevron U.S.A. Products Co., Inc., and operated by Chevron U.S.A. Products Co., Inc., and U.S. Government Defense Fuel Supply Center.

(204) **Shell Oil Co., Port Tampa Terminal Wharf** (27°51'39"N., 82°32'53"W.): 650 feet of berthing space available with dolphins; 34 feet alongside; deck height, 9 feet; pipelines extend to storage tanks, 953,000-barrel capacity; receipt and occasional shipment of petroleum products; owned by Shell Oil Products Co. and BP Oil Co.

(205) **Tampa Bulk Services, Port Tampa Wharf** (27°51'44"N., 82°32'54"W.): 730 feet of berthing space with dolphins; 34 feet alongside; deck height, 7 feet; conveyor loading system, 1,100-ton-per-hour loading rate; storage tanks and buildings for

26,500 tons of cargo; shipment of citrus pellets and animal feed; owned and operated by Tampa Bulk Services, Inc.

(206) **Supplies.**—All grades of fuel oil are available. Large oceangoing vessels are normally bunkered at berth by tank barges. Bunkers can also be obtained from Amoco Oil Co., Tampa Terminal Wharf on the E side of Sparkman Channel. Water is available at most of the piers. Marine supplies and provisions are available in any quantity.

(207) **Repairs.**—The Port of Tampa has facilities for making all types of hull and engine repairs to vessels of all sizes. Several companies operate waterfront facilities at the port for the repair and conversion of ocean-going vessels, tugs, barges, and small vessels. The largest shipyard, on the E side of Sparkman Channel, has a graving dock that is 907 feet long at the bottom, 150 feet wide, and 22 feet deep over the sill. The largest floating drydock, on the E side of Ybor Channel, has a 5,400-ton capacity, a length of 408 feet, a clear width of 101 feet, and a depth of 26 feet over the keel blocks. The largest marine railway, at the shipyard on the Hillsborough River, has a 400-ton capacity and can haul out vessels to 200 feet long, 45 feet wide, and 8½-foot draft. Machine, foundry, carpenter, and electric shops, outfitting wharves, and cranes up to 250 tons are available at shipyards at Tampa.

(208) In addition, a number of firms without waterfront facilities engage in marine repair work. These companies maintain shops and portable equipment for making above-the-waterline repairs and for installing equipment, gear, and machinery on all types of craft at their berths.

(209) **Communications.**—Tampa is served by the Seaboard System Railroad. Regular scheduled steamship service is maintained between Tampa and foreign ports, and Caribbean and West Indies ports. Several major airlines provide frequent scheduled service between Tampa International Airport, at the W end of the city, and domestic and overseas points. There is bus and trucking service to all points.

(210) **Small-craft facilities.**—Small-craft facilities in Tampa are limited. The municipal boat landing is on the W side of the entrance to Hillsborough River. The Majorie Park Yacht Basin on Davis Islands, on the W side of Seddon Channel, has gasoline, water, a launching ramp, and open and covered berths for boats up to 50 feet. Diesel fuel is available by truck. The basin has depths of about 7 feet.

(211) **Hillsborough River** flows S through the city of Tampa into the turning basin at the N end of Seddon Channel. Daymarkers mark the channel for a short distance to the NW side of North Boulevard Bridge. The stream is narrow above Tampa and relatively deep. The head of navigation is the dam at Sulphur Springs, 8 miles above the mouth. In January 1985, the controlling depth in the dredged channel in the river was 4 feet (6 feet on the centerline) to just above Columbus Drive Bridge, about 2.5 miles above the mouth.

(212) The Platt Street Bridge, at the mouth of the Hillsborough River, has a bascule span with a clearance of 15 feet. About 0.1 mile above the mouth are twin fixed bridges with a clearance of 40 feet, and bascule bridges adjacent to the N with a clearance of 15 feet. The bascule bridge at Kennedy Boulevard, 0.35 mile above the mouth, has a clearance of 11 feet. About 0.65 mile above the mouth are bascule bridges with a clearance of 7 feet. About 0.9 mile above the mouth is a bascule bridge with a clearance of 12 feet. About 1.0 mile above the mouth, the expressway twin fixed bridges have a clearance of 40 feet at the center, and

the North Boulevard fixed highway bridge, about 1.3 above the mouth, has a clearance of 40 feet. Various lift bridges cross the Hillsborough River N of the North Boulevard highway bridge. (See **117.1 through 117.59 and 117.291**, chapter 2, for draw-bridge regulations.)

(213) **Old Tampa Bay**, the NW arm of Tampa Bay, is separated from Hillsborough Bay by Interbay Peninsula. Old Tampa Bay is 12 miles long and ranges in width from 2.5 miles at the entrance, to 6 miles; about three-fourths of the bay area has depths ranging from 6 to 17 feet. A branch of the main ship channel leads through the shoals at the entrance to Old Tampa Bay to the wharves and turning basin at Port Tampa. A Federal project provides for a depth of 34 feet to and including the turning basin. (See Notice to Mariners and latest editions of charts for controlling depths.) The channel is well marked by buoys and lighted ranges. Spoil banks border the E side of the N-S reaches of the channel; several spoil islands 5 to 10 feet high are just S of Port Tampa.

(214) A swash channel from Port Tampa parallels the SW shore of Interbay Peninsula at a distance of about 0.6 mile. The channel is marked by daybeacons and has a controlling depth of 7 to 8 feet.

(215) A **danger zone** of a small-arms firing range of **MacDill Air Force Base** is on the SW shore of **Interbay Peninsula**. (See **334.630**, chapter 2, for limits and regulations.)

(216) A privately dredged channel extends from the S end of Port Tampa (Cut K) Channel NW to a turning basin at the powerplant at Weedon Island. In July 1981, the reported controlling depths were 32 feet for a midwidth of 270 feet in the channel to the bend, thence 29 feet for a midwidth of 150 feet to the turning basin, and 32 feet in the basin. The channel is marked by a private lighted range and lighted buoys. A slip at the plant has a controlling depth of 32 feet.

(217) An **explosives anchorage** is about 0.6 mile N of the junction of the Port Tampa Channel and the channel to the powerplant at Weedon Island. (See **110.1 and 110.193 (a)(3), and (b)(2)**, chapter 2, for limits and regulations.)

(218) **Port Tampa** is an important shipping terminus on the E shore of Old Tampa Bay just inside the entrance. The elevators, oil tanks, and the long slip are conspicuous from Tampa Bay as are two high radio towers near the W end of Gandy Bridge Causeway and the stacks of the powerplant on Weedon Island. The terminal facilities at Port Tampa are at the entrance and along both sides of a long dredged slip. These facilities were described under Tampa wharves, earlier in the chapter.

(219) **Gandy Highway Bridge** (U.S. Route 92), crossing Old Tampa Bay about 1.5 miles N of Port Tampa, has three fixed spans with a clearance of 43 feet through the opening about 1 mile W of the Interbay Peninsula shore. A bicycle trail and fishing pier parallel the highway bridge.

(220) In October 1980, numerous submerged pilings were reported about 0.2 mile S of the E end of the bridge. Caution should be exercised in the area.

(221) Unmarked channels lead to basins at the E end of Gandy Highway Bridge at **Rattlesnake**. In 1999, the channel on the N side of the bridge had a reported controlling depth of 6 feet to the basin.

(222) An unmarked channel leads along the S side of the E end of Gandy Bridge approach to two shipyards. In April 1982, there was reported to be 17 feet in the channel and 16 feet in the basin at the yard at the head of the channel. The largest floating drydock at the yards has a capacity of 1,600 tons and can lift ves-

sels to 300 feet long, 65 feet wide, and 15-foot draft for hull and engine repairs. There are complete repair facilities at the yards including machine, welding, joiner, paint shops, shore cranes to 185 tons, and a 100-ton floating crane. A liquified petroleum gas handling terminal for barges is on the S bank of the turning basin W of the shipyard.

(223) A yacht basin at the E end of the channel has a 60-ton lift. Dry covered storage, gasoline, diesel fuel, electricity, marine supplies, and hull, engine, and electronic repairs are available.

(224) A boatyard about 0.4 mile S of the bridge has a 60-ton lift. Electricity, water, dry covered storage, and hull and engine repairs are available.

(225) **South Gandy Channel** leads along the S side of the fill at the W end of Gandy Bridge to **Snug Harbor**, where small craft can find good anchorage from storms. Open and covered berths with electricity and open and covered storage are available at several marinas. A full service boatyard is available with wet and dry slips to 85 feet; 70-ton lift. Gasoline, water, ice, and marine supplies are available. The controlling depth in South Gandy Channel to the marinas is about 7 feet.

(226) The approach to South Gandy Channel is from S, between shoals that can be avoided with a little care. When about 100 yards from the outer end of the highway fill, turn W and steer parallel with the fill, following the channel markers.

(227) Along the E shore of Old Tampa Bay, N of Gandy Bridge, are several small craft basins; most are privately marked and maintained.

(228) The W. Howard Frankland Bridge (Interstate Route 275) and Causeway crosses Old Tampa Bay about 3 miles N of Gandy Bridge from just N of Beach Park to just S of Big Island on the W shore. The bridge across the main channel has a fixed span with a clearance of 49 feet. Two other bridges in the causeway crossing the S end of **Big Island Gap** have 44-foot fixed spans with a clearance of 6 feet.

(229) The twin fixed spans of the 49th Street highway bridge crosses the W end of Old Tampa Bay and have a clearance of 47 feet.

(230) **Courtney Campbell Parkway** (State Route 60) crosses Old Tampa Bay about 6 miles above Gandy Bridge. This is a causeway, mostly fill, with a total length of 8 miles. The causeway has two twin fixed navigation spans. The main span, near the center of the causeway, has a clearance of 40 feet. The second span, near the W end of the causeway, has a 40-foot span with a vertical clearance of 10 feet.

(231) In May 1987, a shoal, bare at low water, was reported to extend across the channel under and N of the twin spans 1 mile E of the W end of the causeway.

(232) **Safety Harbor** is a health resort town on the NW shore of Old Tampa Bay 2 miles N of the Courtney Campbell Parkway. A draft of 8 feet can be taken to within 0.5 miles of the town landing.

(233) In March 1990, a reported depth of about 5 feet could be taken to the small basin on the S side of the large waterfront fill 1.6 miles N of the Courtney Campbell Parkway; depths of 4 feet were reported in the basin. Berths with water, electricity, and a public boat ramp are available.

(234) At the head of Old Tampa Bay about 1 mile N of the town of Safety Harbor is the entrance to a large bight also known as Safety Harbor. A draft of 6 feet can be taken into the bight. An overhead power cable crossing the bight entrance from Booth Point to Philippe Point has a clearance of 98 feet. The town of **Oldsmar** is on the NE shore of the bight.



(235) **Charts 11416, 11415, 11411.**—**St. Petersburg**, a large winter resort city, is on the W side of Tampa Bay 6 miles S of Gandy Bridge; and major highways connect it with all parts of the State. The Gandy Bridge and Frankland Bridge offer a short route to Tampa, and the Sunshine Skyway, a toll bridge, connects with points to the S.

(236) **St. Petersburg** has a city hospital and several private hospitals. Gasoline, diesel fuel, water, ice, provisions, and marine supplies are available in quantity. Boats can be chartered and guides engaged. The St. Petersburg—Clearwater International Airport is N of the city, and the Albert Whitted Municipal Airport is on the E waterfront at the center of the city.

(237) **Prominent features.**—The large Municipal Auditorium and the baseball stadium on the E waterfront S of the yacht basins, several large office buildings and hotels, radio towers, and tanks are all prominent.

(238) **Channels.**—A channel with dredged sections extends N for about 5.5 miles from deep water in lower Tampa Bay to an entrance channel leading W to basins at the Port of St. Petersburg and **Bayboro Harbor**. In March 2002, the controlling depth was 18.7 feet (20.0 feet at midchannel) in the two dredged channels leading N to the entrance, thence 19.0 feet in the entrance channel to the Port of St. Petersburg with 22.4 feet in the basin except for shoaling to 17.0 feet along the E side, thence 15.0 feet to the basin at Bayboro Harbor with 10.8 to 12.0 feet available in the basin.

(239) A draft of 19 feet can be taken to the Port of St. Petersburg by following the main ship channel in Tampa Bay through the W reach leading to Port Tampa then turning SW into the natural deepwater area extending to the Port of St. Petersburg entrance channel. The channels are marked by lights, a lighted range, a daybeacon, and lighted and unlighted buoys. Marked and unmarked fish havens are in the natural deepwater area NE of St. Petersburg.

(240) **Pilotage.**—Pilots for St. Petersburg are obtained through the Tampa Pilot Association. (See pilotage for Tampa.)

(241) **Quarantine, customs, immigration, and agricultural quarantine.**—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(242) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) A city hospital and several private hospitals are in St. Petersburg.

(243) **St. Petersburg** is a **customs port of entry**.

(244) **Port of St. Petersburg**, the deepest and southernmost basin along the city waterfront, is about 500 yards long and 400 yards wide. The Port of St. Petersburg Wharf, along the N side of the basin, provides about 1,500 feet of berthing space with a reported 22 feet alongside and a deck height of 8 feet. Fresh water, electrical shore power connections, and telephone service are available. The wharf is used for the receipt and shipment of general cargo and mooring cruise vessels. Cargo is handled by rented mobile cranes or ships' gear. **St. Petersburg Coast Guard Station and St. Petersburg Coast Guard Group** are at the outer end of the basin.

(245) **Bayboro Harbor**, which is entered from the inner end of the ship basin, is used by numerous fishing boats and other small commercial craft.

(246) Oil terminals, marinas, boatyards, and other commercial landings are along the banks of **Salt Creek**, which empties into the S side of Bayboro Harbor. Controlling depths in the creek are

about 8 feet to the first bend, thence 5 feet to about 100 yards E of the first bridge at Third Street South, which is the head of navigation. A marina near the head of navigation has a 20-ton mobile hoist that can haul out craft for complete repairs. Berths with electricity and water are available.

(247) Northward along the St. Petersburg waterfront from the ship basin are the Municipal Pier and three yacht basins. The pier is a concrete structure about 0.5 mile long with a five-story concrete structure in the shape of an inverted pyramid at its outer end. Lights mark the NE and SE corners of the pier and the top of the inverted pyramidal structure. North Yacht Basin and Central Yacht Basin are on either side of the inner half of the pier. Both basins are enclosed by sea walls and provide excellent protection for vessels up to about 125 feet. Depths of about 10 feet are in North, Central, and South Yacht Basins. Gasoline, diesel fuel, water, ice, marine supplies, launching ramps, and open and covered berthage are available at the St. Petersburg Municipal Marina and the yacht club in Central Basin. North Yacht Basin is used exclusively as an anchorage area, but is reported to have poor holding ground. A marina manager is at the Municipal Marina; telephone, 727-893-7329, or via VHF-FM channel 16 or 68.

(248) Lights mark the ends of the moles on either side of the entrance to the Central Yacht Basin. A submerged obstruction, the ruins of a former railroad pier, S of the entrance channel is marked by a light. Numerous slips are on the N and W sides of the basin, and a public landing is on the W side. The St. Petersburg Yacht Club is in the Central Yacht Basin.

(249) **Boating Safety Information.**—Pinellas County Waterway Management Committee offers the marine public local safe-boating information; call 727-684-8559.

(250) **Coffeepot Bayou**, 1 mile N of the Municipal Pier, affords good anchorage for small craft that can pass under Snell Isle Boulevard bridge, which has a 34-foot bascule span with a clearance of 7 feet. (See 117.1 through 117.59 and 117.279, chapter 2, for drawbridge regulations.) The entrance channel is well marked with private daymarkers, and a depth of about 5 feet can be carried.

(251) **Smacks Bayou**, about 1 mile NE of Coffeepot Bayou, has a depth of about 5 feet; the approach from the S is marked by private daybeacons. Inside, there is deeper water resulting from dredging to provide land fill. Any vessel able to enter and pass Overlook Drive Highway Bridge, which has a 38-foot fixed span with a clearance of 11 feet, will find good shelter. A marina just inside the entrance has water, ice, and berthing for about 30 boats.

(252) **Bayou Grande**, about 1.8 miles N of Smacks Bayou and about 3.3 miles S of the Gandy Bridge, empties into the W side of Tampa Bay. The entrance channel is reportedly marked by private aids with a controlling depth of about 7 feet in October 1990. The basins on the S side of the bayou entrance offer good protection for small boats during periods of very bad weather.

(253) The center 100-foot section of the former Weedon Drive Highway Bridge crossing the N end of Bayou Grande has been removed, and the fixed portions of the bridge on either side of the channel remain as fishing piers. Above Bayou Grande, the waterway is known as **Riviera Bay**. A highway bridge at the W end of the bay has a 22-foot fixed span with a clearance of 10 feet.

(254) **Big Bayou** is about 1 mile S of the St. Petersburg ship basin. The entrance channel, marked by private daybeacons, has a depth of about 3 feet.

(255) **Bayou Bonita**, a small-boat channel behind **Coquina Key (Lewis Island)**, connects Big and Little Bayous. It is crossed by two highway bridges, each with a 40-foot fixed span and a pipeline attached. The minimum clearance is 9 feet. Overhead power cables crossing the bayou immediately N of each bridge have a minimum clearance of 36 feet.

(256) **Little Bayou** is 2.5 miles S of the St. Petersburg ship basin. A channel with a reported depth of 6 feet and marked by private daybeacons leads into the bayou. A privately owned yacht basin is in the S part of the bayou.

(257) **Point Pinellas** is the SE extremity of Pinellas Peninsula. A channel, marked by private daybeacons, leads to several launching ramps.

(258) **Charts 11415, 11416.**—The Intracoastal Waterway leads from Anna Maria Sound, across the lower part of Tampa Bay, thence through **Boca Ciega Bay**, The Narrows, Clearwater Harbor, and St. Joseph Sound to Anclote Anchorage. The section of the Intracoastal Waterway from Tampa Bay to Anclote Anchorage passing through the waters described in this chapter and places along its route are discussed in chapter 12.

(259) **Bunces Pass** (27°38.9'N., 82°44.4'W.), at the N end of Mullet Key, is a passage into the S part of Boca Ciega Bay from the Gulf, and through to Tampa Bay. It is unmarked and, in August 2001, shoaling was reported of less than one foot over the bar at the Gulf entrance with greater depths inside. Local knowledge is necessary to use the pass. The State Route 679 Pinellas Bayway Bridge (Structure F) over the pass has a fixed span with a clearance of 18 feet. In September 2000, a replacement fixed highway bridge with a design clearance of 20 feet was under construction close E of the existing State Route 679 highway bridge. The Sunshine Skyway Bridge over the E end of the pass has a fixed span with a clearance of 16 feet at the center.

(260) A stake-marked channel with a controlling depth of 3 feet leads from Bunces Pass to the S end of **Mullet Key Bayou**. Small craft can anchor in the bayou.

(261) **St. Pete Beach**, N of Bunces Pass and about 5 miles N of Egmont Key Light (27°36'00"N., 82°45'36"W.), is a beach community that occupies most of the 5-mile-long barrier island known as **Long Key**. **Pass-a-Grille Beach**, **Don Ce Sar Beach**, and **Lido Beach** are sections of the resort city. A large hotel with four towers, other hotel and apartment buildings, and a church spire are prominent.

(262) **Tierra Verde**, immediately E of the S part of Long Key, is a resort on what was formerly **Pine Key** and formerly a part of **Cabbage Key**. A marina at the N end of Tierra Verde has transient berths, provisions, and other services.

(263) **North Channel**, immediately S of Long Key, is a dredged channel that leads over the bar from the Gulf and connects with **Pass-a-Grille Channel** which separates the S part of Long Key from Tierra Verde and joins the main channel of the Intracoastal Waterway at the N end of Tierra Verde. North Channel and Pass-a-Grille Channel are well marked by lights and daybeacons. In May 1999, the controlling depth in North Channel was 2 feet (3 feet at midchannel) to Daybeacon 9, thence 8½ feet to the main channel of the Intracoastal Waterway, **South Channel** leads to Pass-a-Grille Channel from the SW and passes E of Shell Key; it is unmarked and not recommended.

(264) In Pass-a-Grille Channel the flood current sets N with an average velocity of 1.2 knots and ebbs S with an average velocity of 1.4 knots. (See Tidal Current Tables for daily predictions.)

(265) In May 1982, it was reported that depths of 8 to 10 feet could be taken to the service wharf and marina on the island channel between Long Key and **Vina del Mar**. Berths, gasoline, diesel fuel, water, ice, marine supplies, and storage are available. A 20-ton mobile lift and other smaller lifts are available at the marina; complete hull and engine repairs can be made.

(266) **Mud Key Channel** connects the island channel between Long Key and Vina del Mar with the main channel of the Intracoastal Waterway N of Vina del Mar. Submerged pilings of former private daybeacons may exist in the channel. Caution is advised. State Route 682 (Structure D) bridge of the Pinellas Bayway from Long Key to the landfill E has a 19-foot fixed span with a clearance of 9 feet. About 500 yards E, another Pinellas Bayway bridge (State Route 682/Structure C) over the main channel of the Intracoastal Waterway has a bascule span with a clearance of 25 feet at the center. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.)

(267) **Blind Pass**, about 4 miles N of North Channel, is a shallow pass from the Gulf to Boca Ciega Bay between the N end of Long Key and Treasure Island. Near the pass are several very prominent landmarks that include a large white 10-story apartment hotel, a large hotel with penthouse, and a church spire. The pass is used by local fishing boats and other small craft and, in May 1982, had a reported controlling depth of 3 feet. State Route 699 highway bridge crossing the pass near the inner end has a 37-foot fixed span with a clearance of 11 feet. Overhead power cables at the bridge have a minimum clearance of 30 feet.

(268) **Treasure Island** is a winter resort with many hotels, motels, and other conveniences.

(269) **Chart 11411.—Treasure Island Causeway** crosses Boca Ciega Bay from Treasure Island via Paradise Island and South Causeway Isles to the mainland at St. Petersburg. The causeway has a bascule span over the Intracoastal Waterway with a clearance of 8 feet. The bridgetender monitors VHF-FM channel 9; call signs WQZ-367 or KZU-970. (See **117.1 through 117.59 and 117.287**, chapter 2, for drawbridge regulations.) The E and W openings between the mainland and South Causeway Isles and between Paradise and Treasure Islands have fixed spans with center clearances of 4 and 5 feet, respectively. An overhead power cable of unknown clearance crosses between the mainland and South Causeway Isles.

(270) **Johns Pass**, about 3 miles N of Blind Pass, between Treasure Island and **Sand Key**, affords passage for small craft from the Gulf to the N part of Boca Ciega Bay. A marked channel leads from the Gulf of Mexico through Johns Pass thence N to the Intracoastal Waterway. In January 2002, the controlling depth in the entrance channel was 10.0 feet to the bridge over the pass, thence 8.0 feet to Daybeacon 8, thence 5.1 feet (5.4 feet at midchannel) to the intersection with the Intracoastal Waterway. The channel is reportedly subject to considerable shoaling between Daybeacons 3 and 5. The entrance to the channel is marked by a light, and the channel is marked by lights and daybeacons. A natural channel just inside the pass leads E to the Intracoastal Waterway; it is marked at its E end by a daybeacon. In Johns Pass the flood current sets NE at an average velocity of 2.0 knots and ebbs SW at an average velocity of 1.5 knots. (See Tidal Current Tables for daily predictions.)

(271) State Route 699 highway bridge over the pass has a bascule span with a clearance of 25 feet at the center. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) The

bridgetender monitors and works on VHF-FM channel 9; call sign WQZ 213.

(272) Numerous fishing piers are near Johns Pass Bridge.

(273) Small-craft facilities inside and N and S of Johns Pass and **Madeira Beach** can provide berths, gasoline, diesel fuel, water, ice, and a lift to 50 tons for hull repairs.

(274) **Sand Key** is a 12-mile-long barrier island that extends from Johns Pass to Clearwater Pass. The island has been developed as a winter resort and has several well-developed communities.

(275) **Prominent features.**—The 1,000-foot fishing pier at **Redington Shores**, large apartment hotels with penthouses on the island, and the water tank at the Veterans Hospital at Bay Pines are all conspicuous.

(276) **Clearwater Pass**, 12 miles N from Johns Pass, extends E from the Gulf between the N end of Sand Key and the S end of **Clearwater Beach Island**. The pass is crossed by Pinellas County Route 183 highway bridge, which has a clearance of 74 feet.

(277) There are many prominent features in the Clearwater area including a large white apartment hotel near the N end of Clearwater Beach Island, a tall water tank near the middle of the island, a large hotel on the island on the N side of the Clearwater Memorial Causeway, several tall radio towers, and several other prominent buildings. At Dunedin, 3 miles N of Clearwater, a large hotel, two tanks, and a stack are conspicuous.

(278) A dredged channel leads from the Gulf through Clearwater Pass to a junction with the Intracoastal Waterway, and a dredged side channel leads N from just inside the pass along the E side of Clearwater Beach Island to a turning basin at the W end of Clearwater Memorial Causeway. In April 2002, the controlling depths were 8.4 feet (9.1 feet at midchannel) to the fixed highway bridge, thence 4.0 feet (7.1 feet at midchannel) to the Intracoastal Waterway, and 7.5 feet in the side channel to the turning basin with 6.9 to 8.0 feet in the basin. The channels are well marked by lights and daybeacons. **Clearwater Pass Channel Light 1** (27°58'18"N., 82°50'48"W.) marks the entrance from the Gulf.

(279) The **tidal current** in Clearwater Pass averages about 1.2 knots. The mean range of **tide** at Clearwater is 1.8 feet.

(280) The city of Clearwater operates the City Pier and Municipal Marina at the turning basin at the W end of Clearwater Memorial Causeway. The marina can provide berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies. The **harbormaster** has his office at the marina and assigns berths. He can be contacted on VHF-FM channel 16 or by telephone (727-462-6954) for marine information or berthing instructions. The Pinellas County Sheriff boat is based at the marina. **Coast Guard Station Sand Key** is on the E side of Sand Key about 1 mile S of Clearwater Pass.

(281) Clearwater Harbor is a link in the Intracoastal Waterway, Caloosahatchee River, Fla., to Brownsville, Tex. Clearwater Harbor and the city of Clearwater are described in chapter 12.

(282) **Charts 11411, 11412.**—**St. Joseph Sound** extends N from Clearwater Harbor nearly to Anclote Keys, and is separated from the Gulf for a part of the distance by narrow strips of beach known as **Caladesi Island** and **Honeymoon Island**.

(283) **COLREGS Demarcation Lines.**—The lines established for St. Joseph Sound are described in **80.753**, chapter 2.

(284) **Dunedin Pass**, 3 miles N of Clearwater Pass at the opposite end of Clearwater Beach Island, is marked by private

daybeacons. In December 1984, the pass was reported shoaled to 1 foot and closed to navigation.

(285) A fish haven about 1.3 miles long and 300 yards wide and marked by private buoys is about 3 miles W of the pass.

(286) **Hurricane Pass**, between Caladesi Island and Honeymoon Island, is subject to change, but in May 1982, it was reported that with local knowledge 3 to 5 feet could be carried. A light and daybeacons mark the pass.

(287) A fish haven, 600 feet wide and 2,000 feet long on a N-S heading and marked by private buoys, is about 4.5 miles W of the pass.

(288) Five miles off St. Joseph Sound the current floods N with a velocity of 0.4 knot and ebbs S with a velocity of 0.6 knot.

(289) The area W and N of **Honeymoon Island** was, in 1991, reportedly shoaled to bare and passage between Honeymoon Island and **Three Rooker Bar** to the N should only be made with caution.

(290) **Anclote Keys**, several in number, are about 13 miles N of Clearwater. The trees on the S end of Anclote Key, the largest of the group, are rather tall and can be made out from well offshore. The structure of an abandoned light is reported visible above the trees. In January 1992, a shoal area that uncovers was reported up to 1.4 miles off the N end of the Anclote Key.

(291) The area between the keys and mainland offers good protection from W gales for vessels up to 7 feet in draft. The area can be reached by passing either N or S of the Keys; both passages are well marked. In December 1993, shoaling to 2 feet was reported within 100 feet of both Daybeacon 3X and Daybeacon 5X in the S entrance. Vessels drawing more than 7 feet can anchor W of the keys where, though more exposed to W winds, the water shoals so gradually that the seas are never very heavy, and vessels with good ground tackle can ride out anything but a hurricane. Eastward of the S end of Anclote Key, the tidal current has an average velocity of 0.6 knot on the flood and 0.8 knot on the ebb.

(292) **Anclote River** empties into St. Joseph Sound over a broad shoal area. A tall powerplant stack on the N side of the entrance is reported conspicuous at a distance of 25 miles. The stack is marked by strobe lights by day and by flashing lights at night.

(293) A channel, with dredged sections and with its entrance about 2 miles SW of the S end of Anclote Key, leads from the Gulf to a turning basin at Tarpon Springs. In November 1999-February 2000, the controlling depth was 8 feet in the entrance channel to the turning basin, thence 7 to 9 feet in the turning basin. The channel is marked by lighted ranges and numerous lights and daybeacons. Above Tarpon Springs the river is navigable for drafts of no more than 2 to 3 feet.

(294) **Anclote** is a small town on the N bank of Anclote River about 1 mile above the mouth. A marina has gasoline, water, electricity, marine supplies, and a marine railway that can haul out vessels to 45 feet for hull and engine repairs. A TV tower marked by strobe lights E of town, and a large elevator and water tank at a chemical plant nearby, can be seen for 10 miles; the tank has a light on top.

(295) **Tarpon Springs** is a winter resort and commercial fishing center on the S bank of Anclote River, 3 miles above the mouth. Tarpon Springs, headquarters for the sponge fishing fleet on the W coast of Florida, has a municipal hospital, and rail and highway connections to all parts of the State. The municipal landing is a marginal wharf 330 feet long at the Sponge Exchange, just below the Alternate U.S. Route 19 highway bridge.



(296) There are several small-craft facilities and a yacht club at Tarpon Springs. There is a marine railway 0.4 mile W of Alternate U.S. Route 19 highway bridge that can handle craft up to 95 feet for engine and hull repairs. Water and supplies are available. The yacht club is on the E bank of Tarpon Bayou opposite Chesapeake Point. The mean range of **tide** at Tarpon Springs is 2.1 feet.

(297) Alternate U.S. Route 19 highway bridge with a 40-foot fixed span and a clearance of 10 feet crosses Anclote River about 3 miles above the mouth at Tarpon Springs. A railroad bridge with a 28-foot fixed span and a clearance of 16 feet is about 1 mile upstream of the highway bridge.

(298) **Kreamer Bayou** and **Whitcomb Bayou** empty into Anclote River along the W side of Tarpon Springs. The junction is at the N end of a small island; the river channel passes to the E of the island, and Anclote River South Channel to the bayous passes to the W. The South Channel branches at Chesapeake Point into Kreamer Bayou on the W and via Tarpon Bayou into Whitcomb Bayou on the E. The channel to Kreamer Bayou has shoaled, and only small skiffs can enter. Beckett Bridge, the highway drawbridge over Tarpon Bayou (South Channel) has a 25-foot bascule span with a clearance of 8 feet. (See **117.1 through 117.59** and **117.341**, chapter 2, for drawbridge regulations.) The clearance of the nearby overhead power cable is 38 feet. A public wharf and launching ramp are S of the entrance to **Spring Bayou**, the E arm in Whitcomb Bayou; and another public wharf is at the yacht basin at the entrance. A draft of 3 feet can be carried from Anclote River through Whitcomb Bayou, which is centrally located in the town of Tarpon Springs.

(299) **Chart 11409.**—The shoals that extend over 10 miles offshore along the coast for 40 miles N from Anclote Keys are known under the general name of **St. Martins Reef**. Many of the rocks and shoals are marked by private daybeacons. The outer limit of shallow water and detached shoals is marked by **St. Martin Outer Shoal Light 10** (28°25'48"N., 82°55'06"W.), 16 feet above the water and shown from a dolphin with a red triangular daymark.

(300) Strangers should approach the coast with care, and deep-draft vessels should stay in depths of 30 to 35 feet. Small craft of 3 to 4 feet in draft usually follow the coast more closely, especially during windy weather, and find comparatively smooth water by keeping about 7 miles offshore. Hazy atmosphere frequently obscures this section of the coast, and the vessels standing inshore close enough to sight land are mostly spongers and fishermen, who sometimes anchor in shoal water, soft bottom, behind shell reefs and ride out the heaviest gales.

(301) **Charts 11409, 11411.**—Two privately maintained and marked channels, about 3.5 and 4 miles N of Anclote River, respectively, lead E to a private housing development known as **Gulf Harbors**. No known services are available.

(302) An unmarked fish haven is about 7 miles W of the entrance to Pithlachascotee River, and fish havens marked by private buoys are about 11.5 and 15 miles W of the river entrance.

(303) **Pithlachascotee River**, locally known as the **Cotee River**, empties into the Gulf 7 miles N of Anclote River. The river has an extensive shoal area off the mouth and numerous oyster reefs just inside. A dredged channel, marked by lights and daybeacons, leads from the Gulf to a turning basin just below the first bridge at Port Richey, about 1.2 miles above the mouth. In July 2001, the controlling depth was 4.7 feet (5.4 feet at

midchannel) to the basin with depths of 5.2 to 6.0 feet in the basin. Depths of about 4 feet can be carried across the shoals to the channel entrance. Depths of 2 feet and greater can be carried to New Port Richey with local knowledge.

(304) Four bridges cross the Pithlachascotee River. The first bridge, U.S. Route 19 highway bridge about 1.2 miles above the mouth, has a 48-foot fixed span with a clearance of 12 feet. An overhead power cable with a clearance of 69 feet is close W of the bridge. An overhead power cable about 2 miles above the mouth has an estimated clearance of 40 feet. The second bridge, a highway bridge about 2.7 miles above the mouth, has a 32-foot fixed span with a clearance of 10 feet. The third bridge, State Route 595 highway bridge about 3.6 miles above the mouth, has a 27-foot fixed span with a clearance of 6 feet; overhead power and telephone cables 0.25 mile E of the bridge have a clearance of 38 feet. A fixed highway bridge with reported clearances of 10 feet vertical and 27 feet horizontal is about 0.25 mile above the third bridge.

(305) **Port Richey** is a resort town at the entrance to the river. Several small marinas and a boatyard are here. The boatyard on the N side of the river just below the first highway bridge about 1.2 miles above the mouth has a marine railway that can handle craft up to 40 feet for engine, hull, and electronic repairs. There are marinas just below the same highway bridge that have gasoline, diesel fuel, water, ice, berthage, launching ramps, and marine supplies. Shrimp boats operate from the river.

(306) **New Port Richey** is a town about 2.5 miles above the mouth of Pithlachascotee River. The municipal water tank at the town is prominent from offshore. There are two hospitals and a small public wharf and launching ramp at the town. Gasoline, oil, water, ice, and provisions are available in the town but not on the waterfront.

(307) **Chart 11409.**—**Hudson** is a small town on Hudson Creek, which empties into the Gulf 12 miles N of Anclote River. In November 1992, the entrance channel had a reported centerline controlling depth of about 2 feet. The channel is marked by a private light and daybeacons. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, sewage pump-out, launching ramp, wet and dry storage, and haul-out for vessels to 50 feet are available.

(308) **Aripeka** is a village on **Hammock Creek**, 17 miles N of Anclote River. There are numerous deep springs and shoals in the creek, which has a depth of about 1 foot. The approach to Aripeka is marked by a private light and daybeacons. The highway bridges over the channels around the N and S sides of the island in the middle of the creek have fixed spans with clearances of 4 and 8 feet, respectively. There are fish camps on the creek. Gasoline in cans, water, ice, and provisions are available at the N of the two highway bridges. The village, on State Route 595, has a launching ramp.

(309) **Hernando Beach** is the site of a large housing development 20 miles N of Anclote River. Transient berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, provisions, a launching ramp, and a forklift capable of hauling out craft to 65 feet for hull and engine repairs are available. The approach channel is marked by a private light and daybeacons and can be followed by keeping several yards S of the jetty and fill spit. The channel had a reported controlling depth of 4 feet in 1992. In November 1999, a large submerged rock covered at all stages of tide was reported in the middle of Hernando Beach channel at about

28°30'00"N., 82°40'30"W.; a sign located just outside the SE channel boundary is reported to warn mariners of the impending danger.

(310) **Bayport** is a village at the mouth of **Weeki Wachee River**, 23 miles N of Anclote River. On a favorable tide a draft of about 2 feet can be taken to a small marina about 1.5 miles above the mouth. Gasoline, water, ice, marine supplies, and outboard engine repairs are available. Bayport Channel Approach Light BP (28°32'48"N., 82°42'24"W.) marks the approach to the channel to Weeki Wachee River. **Beacon Rock**, close N of the light, covers at high water and is marked by a private daybeacon. The remainder of the channel is marked by private daybeacons and a light, and continues in a generally E by S direction through the oyster reefs and into the river. A public launching ramp and wharf are near the N side of the river entrance.

(311) **Chassahowitzka River empties into Chassahowitzka Bay** 31 miles N of Anclote River. On a favorable tide a draft of about 2 feet can be taken into the river. The channel is marked by a light and private daybeacons. From Johns Island to the village of Chassahowitzka, the river is shallow and partly blocked by grass and during the summer by hyacinths; the depth is about 1½ feet. **Chassahowitzka** is a small fishing village with a lodge, cabins, and a trailer park; a road connects with the State highway. Berthing, gasoline, water, ice, limited marine supplies, and a launching ramp are available.

(312) **Bird Island** is prominent in the entrance to Chassahowitzka Bay. **Black Rock**, 1.3 miles seaward from the island, bares at half tide. **Chassahowitzka Point**, on the N side of the bay, is a high and conspicuous mangrove key.

(313) **Homosassa River empties into Homosassa Bay** 36 miles N of Anclote River. **St. Martins Keys** are prominent mangrove islets on the N side of the bay entrance. In 1966, an obstruction consisting of a bent railroad track rail was reported about 2.6 miles W of South Point of St. Martins Keys and about 5 miles off the entrance to the river. In June 1981, a rock awash was reported about 2.7 miles W of Homosassa Bay Entrance Light 2, in about 28°41'36"N., 82°51'42"W.

(314) **Homosassa** is a small fishing community 4 miles above the mouth of the river. Several commercial fish houses, a public pier for transient craft, and marinas are here; berths with electricity, gasoline, ice, marine supplies, covered dry storage, launching ramps, and a forklift capable of hauling out craft to 26 feet for engine repairs are available. A launching ramp and berths are available just inside the entrance to Halls River, which empties into the N side of Homosassa River about 1 mile above Homosassa. A highway leads from Homosassa to the town of Crystal River.

(315) In July 1999, the centerline controlling depth was 3½ feet from Homosassa Bay Light 4 to Homosassa River Daybeacon 81, thence 3 feet to Daybeacon 5 at the end of the project. **Homosassa Bay Entrance Light 2** (28°41'24"N., 82°48'42"W.), 16 feet above the water and shown from a dolphin with a red triangular dayboard, about 3.3 miles SW of the entrance to the channel, marks the approach. The river entrance is clearly marked by lights and daybeacons. Shoals on either side of the channel are discernible by their lighter color. The river channel is marked by daybeacons.

(316) The overhead power cables crossing Homosassa River below Homosassa have a reported least clearance of 45 feet.

(317) **Manatees**.—Regulated speed zones for the protection of manatees are in Homosassa River. (See Manatees, chapter 3.)

(318) **Crystal River** empties into the N side of **Crystal Bay** 45 miles N of Anclote River and 23 miles SE from the town of Cedar Keys. **Mangrove Point**, on the S side of the entrance to the bay, is prominent in the approach from the SW. The white shell of **Shell Island**, on the S side of the river's entrance, is prominent when approached from the dredged channel across Crystal Reefs.

(319) A marked channel with dredged sections leads from the Gulf through Crystal Bay and Crystal River to **Kings Bay** and the town of Crystal River at the river head. The channel through Crystal Reefs to the mouth of the river on the N side of Shell Island to Kings Bay is marked by daybeacons. In July 1999, the centerline controlling depth was 4 feet from the entrance channel to Crystal River Daybeacon 24, thence 3 feet to Kings Bay. In 1990, shoaling to bare was reported in the vicinity of Crystal River Entrance Light 1 and Entrance Daybeacon 2. During periods of prolonged NE winds, depths in the river may be lowered 1 to 2 feet below normal levels. With local knowledge, greater depths can be carried in all reaches of the entrance and river. The best water is reported to be in the middle of the river, but local knowledge is necessary and a lookout for shoals must be maintained. A 25 mph speed limit in the channel is strictly enforced year round.

(320) **Salt River** joins Crystal River about 4 miles above the mouth. An overhead power cable with a clearance of 47 feet crosses the entrance to Salt River. The channel is marked with private daybeacons. Berths, electricity, gasoline, diesel, water, ice, marine supplies, a launching ramp, a 35-ton lift, storage and hull and engine repairs are reported available at a marina just above Daybeacon 30. A public fishing pier juts out from the S side of the river 4.5 miles above the mouth. A public launching ramp is available just E of the fishing pier.

(321) The town of **Crystal River**, at the head of the river 6 miles above the mouth, has highway connections. Several commercial fish houses, marinas, and boatyards are at Crystal River in the coves on the NE side of Kings Bay. When entering the coves, keep close W of the small island in the entrance. In May 1982, it was reported that 3 to 4 feet could be carried into the coves; caution is advised. Overhead power cables crossing the coves have a least clearance of 32 feet. Berths, electricity, gasoline, diesel fuel, water, ice, provisions, marine supplies, storage, and launching ramps are available; a marine railway can haul out craft to 60 feet for hull and engine repairs and dry open or covered storage. A **no-wake idle speed** is enforced in the coves.

(322) The mean range of tide at the mouth of the river is about 2.5 feet.

(323) **Manatees**.—Regulated speed zones and a motorboat prohibited area for the protection of manatees are in Kings Bay. (See Manatees, chapter 3.)

(324) **Chart 11408**.—A privately dredged channel, marked by private lights, leads E from the Gulf for about 14 miles to a turning basin at the Florida Power Corporation's Crystal River powerplant about 2 miles NW of Crystal River entrance. In May 1982, the channel had a reported controlling depth of 20 feet. The inner end of the channel is protected by two dikes extending to shore. The N dike is about 3 miles long, and the S dike about 2 miles long. Spoil banks extend along the N side of the channel for about 3.5 miles seaward from the end of the N dike. Two stacks on the N side of the turning basin, four stacks in about 28°58.0'N., 82°41.8'W., several cooling towers, and the powerplant are conspicuous. The stacks at the turning basin, with

alternating bands of white and red, are marked on top by flashing red lights, and by fixed and flashing red lights on the lower section. The 600-foot stacks to the N and the cooling towers are marked by strobe lights. The powerplant has a T-head pier with 500 feet of usable berthing space and 20 feet reported alongside. The pier is used to unload coal from barges. Fresh water and electrical shore-power connections are available.

(325) **Cross Florida Greenway** enters the Gulf about 3.0 miles N of the Crystal River powerplant. The 8.5-mile approach channel, marked by lights and daybeacons, can be approached by way of the two outermost reaches of the powerplant entrance channel which are almost in line with the Greenway canal. In 1981, the approach channel had a centerline controlling depth of 11 feet. The canal is primarily open to barge traffic, but also used by pleasure and fishing boats. About 4.3 miles above the mouth, a highway bridge crosses the canal with a clearance of 65 feet. A Florida Marine Patrol station and public boat ramp are just E of the bridge. About 5.75 miles above the mouth, the Withlacoochee River enters the canal on the S side. About 7.0 miles above the mouth, the Inglis lock is no longer operational. Overhead power cables crossing the canal have a least clearance of 80 feet.

(326) In 1986, the Federal government de-authorized the Cross Florida Barge Canal project and in 1990, turned the right of way to the state of Florida. It is operated by the Office of Greenways and Trails under the State of Florida Department of Environmental Protection. For current information on the Cross Florida Greenway, contact the Office of Greenways and Trails at (850) 488-3701 in Tallahassee, FL.

(327) **Withlacoochee River** rises in the central part of the Florida Peninsula and empties into the Gulf about 17 miles SE of Cedar Keys. **Withlacoochee River Entrance Light 1** (28°58'06"N., 82°49'42"W.), 16 feet above the water and shown from a pile with a green square daymark, marks the approach.

(328) A dredged channel leads from the Gulf to a turning basin at Inglis, about 7 miles above the mouth. Navigation is possible above the turning basin in an unmarked channel to a spillway about 11 miles above the mouth. In July 2002, the controlling depth was 3.1 feet (5.1 feet at midchannel) to Daybeacon 46; thence in 1988-February 1999, the centerline controlling depth was 9½ feet to the turning basin at Inglis with 10 feet on centerline in the turning basin; thence in 1975, 4 feet to a point about 1 mile below the spillway; thence in 1993, 2 feet was reported to the spillway where navigation ends. The dredged channel is marked by lights, and daybeacons to a point about 1 mile above the mouth.

(329) The lock in the Cross Florida Greenway (formerly the Cross Florida Barge Canal) is no longer operational. The body of water above the spillway is locally known as **Lake Rousseau** and leads to **Dunnellon**, 24 miles above the mouth. Local knowledge is recommended for navigation through Lake Rousseau; numerous submerged trees and stumps have been reported in the area. Navigation is possible in the river channel above Dunnellon where depths reportedly vary from less than 1 foot to several feet, depending on time of year and rainfall.

(330) Port Inglis was a town at the mouth of the river which has been abandoned. A public launching ramp and park are on the N side of the entrance.

(331) **Yankeetown**, the principal town on the river, is a small winter resort and fishing village about 3 miles above the mouth. A marina, in the town boat basin on the N side of the river, has limited berthage, gasoline, diesel fuel, water, ice, launching

ramp, and limited marine supplies. A seafood receiving plant is about 1 mile above the marina. **Yankeetown Coast Guard Station** is at Yankeetown.

(332) **Inglis** is a small town about 6 miles above the mouth of the river. Overhead power cables crossing the river about 1 mile below the town have a minimum clearance of 40 feet. The U.S. Route 19 dual highway bridges crossing the river at Inglis have 38-foot fixed spans with clearances of 10 feet.

(333) Floating logs and other debris partially obstruct the channel above Inglis making it passable by small boats only.

(334) **Tides and currents.**—The mean range of tide is 2.5 feet. Off the mouth of the river a tidal current sets E during the flood and W during the ebb. The ebb has a reported velocity of 3 knots at times, and this must be taken into account by vessels coming in from the entrance buoy. A strong NE wind may increase the velocity of the ebb current, and a SW wind may decrease it.

(335) **Manatees.**—Regulated speed zones and a caution zone for the protection of manatees are in the Withlacoochee River and its approaches. (See Manatees, chapter 3.)

(336) **Waccasassa River**, 10 miles N of Withlacoochee River, has the extensive **Waccasassa Reefs** off its entrance. A channel marked by private daybeacons leads E of the reefs and, in May 1982, had a reported controlling depth of 2 feet with greater depths inside the river. A public launching ramp and a marina are on the N shore about 4 and 4.3 miles, respectively, above the mouth. The marina is in a small basin. Gasoline, berths, water, ice, some marine supplies, and a launching ramp are available.

(337) **Cedar Keys**, 95 miles N of Tampa Bay, are a group of low sandy islets covered with mangrove trees. Prominent from offshore is the white tower of the abandoned lighthouse on **Seahorse Key**, the outermost of the group. The tower, which is flanked by two white-roofed buildings, shows to seaward among the trees; the tower is 30 feet high and stands on a 45-foot mound on the S side of the key. **Seahorse Reef**, a dangerous shoal with little depth over it, extends 11 miles SW from Seahorse Key. The outer end of the reef is marked by **Seahorse Reef Light** (28°58'31"N., 83°09'13"W.), 31 feet above the water and shown from a white square skeleton tower on piles. A lighted whistle buoy is about 3.8 miles SW of the light.

(338) A submerged wreck with 7 feet of water over it is about 3.5 miles ESE of Seahorse Reef Light in about 28°57.7'N., 83°05.4'W.

(339) **Main Ship Channel**, a dredged channel, leads from the Gulf in a general NE direction between East Bank and West Bank, E of Seahorse Key and Grassy Key; thence by a crooked and winding channel W of Atsena Otie Key into Cedar Key Harbor. In August 1997, the centerline controlling depth was 7 feet. The channel is well marked by lights and daybeacons. Extreme caution must be exercised at two hairpin curves.

(340) **Northwest Channel**, a dredged channel, leads from the W between North Bank and South Bank. In July-August 1997, the centerline controlling depth was 6½ feet from the entrance to the Main Ship Channel, except for lesser depths to 3 feet between Daybeacon 17 and Light 19. The channel is marked by lights, daybeacons, and an approach light. Small craft bound up the coast should enter by Main Ship Channel and leave by Northwest Channel rather than cross Seahorse Reef. In October 1985, a partially submerged obstruction was reported about 30 yards SW of Northwest Channel Daybeacon 17. In May 1982, local fishermen reported a controlling depth of 4 feet in **Deadmans Channel**, a natural channel, which is unmarked and should not be used without local knowledge.



(341) **South Bar Channel**, the approach channel to Cedar Key from the E, had a reported depth of about 2½ feet in May 1982. The channel is marked by an entrance light and several daybeacons.

(342) **Fog**.—This area has considerable fog during the winter; S winds bring it in, and N winds clear it away.

(343) **Tides and currents**.—The mean range of tide at Cedar Keys is 2.6 feet. Outside the entrance channel the current sets E on the flood and W on the ebb. Inside, the currents generally follow the channels. Currents are strong in the vicinity of the city dock, and caution must be observed when docking with a fair current.

(344) **Cedar Key** is a small town on **Way Key**. The most prominent object in the town is the municipal water tank, 140 feet high. A radio tower is nearby. In May 1982, it was reported that a draft of about 8 feet could be taken through the main channel to the city dock which had reported depths of 8 to 15 feet alongside. A circular boat basin, accessible through a causeway with an estimated clearance of 3 feet, is also used by small boats at Cedar Key.

(345) A marina in the small cove just NE of the city dock can provide berths, water, ice, electricity, and marine supplies. A launching ramp is in the small cove. In May 1982, a reported depth of about 3 feet could be carried in the privately marked channel leading to the marina.

(346) The **Cedar Key State Memorial and Museum** is on the W side of Way Key. An airstrip is here. Several launching ramps are available.

(347) **Suwannee Sound**, 7 miles N from Cedar Keys, has a long line of narrow shoals on the seaward side known as **Suwannee Reef**. The sound is about 8 miles long and has an average width of about 3 miles. The principal entrance to Suwannee Sound is through **Derrick Key Gap**, a dredged channel 4 miles NW from Cedar Keys. In 1962, the centerline controlling depths were 5 feet from Suwannee Sound South Entrance Daybeacon 5 to Derrick Key Gap Channel Daybeacon 2; thence in July 1994, 4 feet in Derrick Key Gap channel. The channel is marked by daybeacons. The passage through Suwannee Sound from Derrick Key Gap is W of **Lone Cabbage Reef**, which extends about 2.3 miles NW from **Lone Cabbage Island**. In July 1994, the unmarked entrance channel to East Pass had a controlling depth of 1½ feet. Lone Cabbage Reef bares in spots at low water and is to be avoided.

(348) **Steamboat Gap**, and **West Gap**, unmarked secondary channels with depths of 4 feet or less, should not be entered without local knowledge. **White Shell Bar Gap**, about 1 mile NW of West Gap, has a controlling depth of about 2 feet through an unmarked channel. About 2.8 miles NW of West Gap is a channel, marked by a private light and daybeacons, which leads from the Gulf of Mexico through **Ranch Bar Gap** to West Pass at the mouth of Suwannee River. In July 1994, the controlling depths were 4 feet in the entrance channel and Wadley Pass to its junction.

(349) **Suwannee River** empties into the N part of Suwannee Sound through the three mouths known as **East Pass**, **West Pass**, and **Wadley Pass**. Wadley Pass is the main entrance. West Pass is little used, and good only for shallow draft boats. A private light and daybeacons mark the entrance to West Pass. In May 1986, East Pass had a centerline controlling depth of 3 feet.

(350) The entrance channel to Wadley Pass, dredged by the Suwannee River Authority, leads on a bearing of 102° from a point in the Gulf about 1.4 miles 260° from **Axe Island**

(29°18.8'N., 83°10.5'W.), thence through Wadley Pass S and E of **Little Bradford Island** to its junction with West Pass. At the SE end of Little Bradford Island, a branch channel leads N through **Northwest Pass**, thence NE into **Salt Creek** to the village of **Suwannee**. Suwannee is also fronted on its E side by the Suwannee River. In September 2001, the controlling depth was 2.4 feet in the entrance channel, thence 3.7 feet in Wadley Pass to its junction with West Pass, thence in 1986, 3 feet on the centerline in Northwest Pass and Salt Creek to Suwannee. Private lights and daybeacons mark these channels.

(351) There is little commerce on the river.

(352) The mean range of **tide** at the mouth of the river is 2.4 feet. Fluctuations are extreme because of freshets. Low river stage occurs in the winter, and high river stage in the fall months.

(353) Once inside the river the centerline controlling depths, in May-July 1986, were 3 feet from the junction of East and West Passes (29°19.0'N., 83°07.2'W.) to **Fanning**, about 26 miles above the junction, and thence 3 feet to **Ellaville**, 109 miles above the junction. At high water stages small boats can go to **White Springs**, 147 miles above the junction.

(354) An unmarked sandbar, locally known as **Jack's Sandbar**, is about 13.7 miles above the junction of East and West Passes. The bar is about 800 yards long and 200 yards wide in places, and is said to cover almost two-thirds of the E side of the river. Depths over the bar range from less than 1 foot to 3 feet. The bar is not discernible because vegetation colors the water a dark brown. It can best be avoided by passing close to the W shore to within 75 to 100 feet of the shore vegetation.

(355) Marinas in the dredged canals on the N side of Suwannee River at the town of Suwannee can provide berths, gasoline, diesel fuel, launching ramps, marine supplies, and hull, engine, and electronic repairs. There are marinas, several fish camps, fish wharves, and a seafood packing plant at the town on Salt Creek. Berths, gasoline, a limited supply of water, and launching ramps are available. Minor hull and engine repairs can be made. There is a post office at the town, and State Route 349 connects the town with Old Town on the main coastal highway.

(356) Water is available at a fish camp at **Vista** about 7.5 miles above the junction of East and West Passes. Gasoline, water, a launching ramp, and marine supplies can be obtained at **Fowlers Bluff** (Fowler Bluff), 10 miles above the junction of East and West Passes; at **Manatee Springs State Park**, 16 miles above the junction; and at **Old Town** at U.S. Route 19 highway bridge, 25 miles above the junction. The bridges, the first above the mouth, have fixed spans with least clearances of about 30 feet at low water stage and 15 feet at high water stage. In May 1985, the lower bridge was being replaced by a fixed bridge with a design clearance of 29 feet at high water stage. The minimum channel clearance of the bridges crossing the river is at the Seaboard System Railroad Bridge at **Old Town** and 28 miles above the junction of East and West Passes. This bridge has a swing span with a channel width of 48 feet and a clearance of 5 feet at high water stage and 15 feet at low water stage. (See 117.1 through 117.59 and 117.333, chapter 2, for drawbridge regulations.) An overhead pipeline and numerous overhead power cables cross Suwannee River between the mouth and Ellaville, least clearance is 23 feet.

(357) **Boiler Gap**, about 1 mile 290° from Axe Island, was formerly used as a passage by local boats going up Salt Creek to Suwannee. The channel through Northwest Pass is now used.

(358) **Chart 11407.—Horseshoe Beach** is a village on **Horseshoe Point**, which is 5 miles WNW from Shired Creek. The village has a seafood packing plant, several fish wharves, a county wharf, and is a shrimp boat base. State Route 351 connects the village with **Cross City** on U.S. Route 19, the main coastal highway. **Horseshoe Beach Approach Light 2** (29°23.3'N., 83°20.4'W.), 16 feet above the water and shown from a dolphin with a triangular red daymark, marks the approach. A dredged channel leads from the Gulf to a turning basin at the 100-foot marginal county wharf. In October 2001, the controlling depth was 5.4 feet (5.8 feet at midchannel) with 5.2 to 5.8 feet in the basin. The channel is marked by lights and daybeacons. A branch channel leads from the turning basin around Horseshoe Point to a basin on the N side of the point. This channel is marked by private stakes.

(359) Spoil banks are on either side of the entrance channel about in the middle of the dredged cut. In January 1981, a sunken wreck was reported about 3.5 miles SSW of the entrance light in about 29°20'N., 83°22'W. A fish haven is about 6 miles SE of the entrance light. There are fish wharves on a dredged basin that extends about 1,000 feet NE from the E end of the turning basin. There is a boatyard at the head of the basin with a marine railway that can handle craft up to 50 feet for hull and engine repairs. Berths, gasoline, diesel fuel by truck, wet and dry covered storage, water, ice, marine supplies, and a launching ramp are available.

(360) Overhead power cables leading from the mainland at Horseshoe Beach to off-lying Grassy Island, Bird Island, and Cotton Island have clearances of 34 feet.

(361) **Pepperfish Keys**, about 5 miles NW of Horseshoe Point, are the only features that a stranger can recognize between Cedar Keys and St. Marks River. Pepperfish Keys are 0.3 to 1 mile off the mainland and can be made out at a distance of 5 to 6 miles. The white sand beach on the northwesternmost key is easily identified. Protected anchorage is available for small craft N of this key where depths are 3 to 10 feet and the bottom is sand with patches of boulders. The approach to the anchorage is through an unmarked channel that extends in an ESE direction. Boats of less than 3 feet in draft can enter by keeping in dark water; the shoals are discernible by lighter color.

(362) **Steinhatchee River** empties into **Deadman Bay** about 15 miles NNW of Horseshoe Point. **Steinhatchee River Light 1** (29°39.4'N., 83°27.4'W.), 30 feet above the water and shown from a pile with a square green daymark, marks the entrance. A dredged channel leads through Deadman Bay to a turning basin at the seafood plants on the S bank of the river about 2 miles above the mouth. In February 1999, the controlling depths were 3½ feet (5½ feet at midchannel) to the turning basin, thence 1 to 4 feet in the S half and 4½ to 6 feet in the N half of the basin. Lights and daybeacons mark the channel. A water tank at Steinhatchee is reported to be prominent from seaward.

(363) A fish haven, marked by private buoys, is about 9 miles W of the light marking the entrance to Steinhatchee River.

(364) **Steinhatchee** is a small village and fishing resort on the N bank of the river about 1.2 miles above the mouth. It is the base for a commercial fishing fleet. There are marinas with boat lifts and several fish camps. Craft up to 23 feet can be handled for hull and engine repairs, or open or covered storage. Berths, electricity, gasoline, diesel fuel, water, marine supplies, ice, provisions, and launching ramps are available. On the S bank of the river

about 0.5 mile above Steinhatchee are seafood packing plants and two private boatyards. Craft up to 50 feet can be handled in an emergency.

(365) State Route 358 highway bridge, 2.2 miles above the mouth, has a 45-foot fixed span with a clearance of 25 feet. At **Jena**, about 3 miles above the mouth, there is a fish packing house. Overhead power cables 0.8, 1.6, and 2.5 miles above the bridge have clearances of 43, 43, and 40 feet, respectively. There are several fish camps on the river above Jena. State Route 358 connects Jena with the main coastal highway, U.S. Route 19. State Route 51 runs along the N bank of the river to the main highway. State Route 361 runs along the coast as far as Adams Beach and joins U.S. Route 19 a few miles S of **Perry**.

(366) **Dallus Creek**, 5 miles NW from Steinhatchee River, has a bar across its mouth that bares at low water. Small boats of not more than 2 feet in draft use the creek as far as **Dallus Creek Landing** a mile above the mouth, where a road connects with the main highway.

(367) The pine trees on **Piney Point**, 10 miles NW from Steinhatchee River, are visible from well offshore on a clear day. Several small villages N of Piney Point have roads connecting with State Route 361 and the main U.S. Route 19 coastal highway, but offer no supplies. The village of **Fish Creek** is 0.5 mile above the mouth of Fish Creek, 2 miles N from Piney Point.

(368) A data tower marked by a private light is 10.4 miles WSW of Piney Point in about 29°42'28"N., 83°46'21"W. Mariners are advised not to pass within 150 feet of the tower to avoid its guy wires.

(369) **Cedar Beach** on **Cedar Island**, about 13 miles NW of Steinhatchee and about 3 miles N of Piney Point, has a boat ramp and a fishing pier for the use of Cedar Island residents. Fresh water is available. The approach is marked by a private light and daybeacons.

(370) **Keaton Beach**, a fishing village 4 miles NW of Piney Point, is reached through a small-boat channel. In August 2001, the controlling depth was 1.7 feet (2.8 feet at midchannel). The approach is marked by lights and daybeacons. Small docks and several marinas are at the village. Berths, gasoline, diesel fuel, water, ice, a launching ramp, marine supplies, and hull and engine repairs are available as well as a hoist that can handle craft up to 40 feet.

(371) **Jug Island**, a summer resort 5 miles NW of Piney Point, has a small-boat wharf. **Dekle Beach**, about 0.5 mile N of Jug Island, has a boat ramp, rental cottages, and a grocery store. **Adams Beach** is 8 miles N from Piney Point. **Yates Creek Landing** and **Spring Warrior** are small landings on the creeks of the same names 9 and 11 miles, respectively, NNW from Piney Point. A fish camp is about 0.5 mile above the mouth of the Spring Warrior Creek on the N side. Berths, gasoline, ice, provisions, and a launching ramp are available. The creek is marked by a private light and piles and is reported navigable by craft drawing 3 feet on a favorable tide.

(372) **Fenholloway River** empties into the Gulf of Mexico E of Apalachee Bay and about 17 miles NW of Piney Point. A draft of 3 feet can be taken into the river on a favorable tide, but a knowledge of local conditions is needed. A private light marks the W side of the entrance to the river. The river is navigable for only a few miles above the mouth. About 2 miles above the river's mouth is a small-boat landing but no supplies are available. A paved road connects the landing with U.S. Route 98 at **Hampton Springs** where gasoline and supplies are available.